



COMMONWEALTH OF MASSACHUSETTS  
EXECUTIVE OFFICE OF ENERGY & ENVIRONMENTAL AFFAIRS  
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**MEMORANDUM**

**TO: Directors of Massachusetts-Certified Environmental Microbiology Laboratories**

**FROM: Ann Marie Allen, Director, MassDEP Laboratory Certification Office**

**RE: Certification for the Analysis of Enterococci (Presence/Absence) in Ground Water Source Samples**

**DATE: May 15, 2009**

Dear Laboratory Director:

Beginning December 1, 2009, all Massachusetts public water systems (PWS) using ground water (wells), including systems receiving their water from other systems using ground water (*i.e.*, consecutive systems) must comply with the new federal Ground Water Rule (GWR). This rule is intended to increase protection against potential viral contamination in PWSs that use ground water sources. The rule requires a PWS to collect and analyze ground water source samples for the presence of fecal indicator organisms each time the PWS is notified of a total coliform-positive sample collected under Total Coliform Rule bacteria monitoring. Some PWSs will be required to test for *E. coli* as the fecal indicator; other PWSs will test for enterococci.

To support the MassDEP Drinking Water Program's implementation of this rule, the Laboratory Certification Office (LCO) will begin accepting applications for certification to analyze enterococci in source water samples. In accord with the requirements of the GWR, the LCO will offer certification for the detection (*i.e.*, the determination of presence/absence) of enterococci in ground water source samples.

To be considered for certification for the detection of enterococci in ground water source samples, the laboratory must:

- A) Complete an application for modification of microbiology certification (LES 04 EA). Applications are available on the web at <http://www.mass.gov/dep/service/online/lcforms.htm>
- B) Use methodology approved by federal regulations at 40 CFR Part 141.402(c)(2) for the source water monitoring of ground water samples for the presence of enterococci.
- C) Participate in proficiency test studies meeting the following requirements:

Proficiency test studies must consist of ten samples, all shipped at the same time, in either a lyophilized, dehydrated, or aqueous state. The set must include samples, in various combinations, that are enterococci positive (*e.g.*, *Enterococcus faecium* or *Enterococcus faecalis*), enterococci negative (*e.g.*, *Serratia marcescens* or *E. coli*), and at least one blank.

Samples must be representative of potable water source water samples (*i.e.*, a low count of organisms). Each set must be analyzed with a single analytical method. To be scored as “acceptable”, a laboratory must correctly analyze a minimum of nine of the ten samples, with no false-negative results. Laboratories may participate in proficiency test studies from any A2LA-accredited microbiology proficiency test vendor able to provide sample sets meeting these criteria.

Samples must be analyzed in a manner compliant with the current Laboratory Certification Office Policy on Microbiology Proficiency Testing (#WES 08.002). As specified in this policy, the LCO requires that laboratories successfully complete two of the three most recent proficiency test studies participated in to obtain certification. After receiving certification, laboratories are required to analyze one proficiency test study each calendar year in order to maintain certification.

- D) For laboratories located outside of Massachusetts, maintain resident state certification for the method(s) for which the laboratory is applying for Massachusetts certification.

**NOTE:** In order that sufficient laboratory capacity may be available by December, we strongly urge that laboratories interested in this certification complete applications and participate in proficiency test studies as soon as possible so that inspections can be scheduled. Applications will be processed in the order that they are received with consideration given to the completeness of the application at the time of submittal.

To date, one proficiency test provider (NSI of Raleigh, North Carolina) has made available a product compliant with section C of this memorandum. In the future, other A2LA accredited microbiology proficiency test providers may also have studies available. As the product is new to the providers and demand is limited, it is **strongly recommended** that laboratories contact proficiency test providers **early** in the application process to arrange for study participation.

The EPA Office of Water has published the Ground Water Rule Source Water Monitoring Guidance Manual (EPA 815-R-07-019) to assist laboratories and water suppliers with implementation of this rule. A copy of the guidance manual may be found at [http://www.epa.gov/safewater/disinfection/gwr/pdfs/guide\\_gwr\\_sourcewatermonitoring.pdf](http://www.epa.gov/safewater/disinfection/gwr/pdfs/guide_gwr_sourcewatermonitoring.pdf)

If you have any questions pertaining to laboratory certification or the application process described above, please contact the Laboratory Certification Office at (978) 682-5237. For information relating to the implementation of the Ground Water Rule in Massachusetts please contact Denise Springborg of the Drinking Water Program at (617) 574-6879.

Sincerely,



Ann Marie Allen  
Director, Laboratory Certification Office.

cc: Oscar Pancorbo, Ph.D., MassDEP, DEA-WES Division and Station Director  
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