



NATIONAL PRIMARY AND SECONDARY DRINKING WATER REGULATIONS: ANALYTICAL METHODS FOR CHEMICAL AND MICROBIOLOGICAL CONTAMINANTS AND REVISIONS TO LABORATORY CERTIFICATION REQUIREMENTS - FINAL RULE

Fact Sheet

Under the Safe Drinking Water Act, Environmental Protection Agency (EPA) approves analytical methods to be used in compliance monitoring of drinking water. Periodically, the Agency revises or replaces compliance methods based on user suggestions, changing regulatory needs and improvements in technology.

This rule, which was promulgated on December 1, 1999 (64 FR 67450), approves the use of updated versions of 14 EPA methods, 25 American Society for Testing and Materials (ASTM) methods, and 54 Standard Methods for Examination of Water and Wastewater (SM) for compliance with drinking water standards and monitoring requirements. Compared to the currently approved versions, the new versions contain primarily editorial, technical or other changes that make the method easier to conduct or safer. EPA will withdraw earlier versions of the 14 EPA methods on June 1, 2001. Earlier versions of approved methods published by ASTM and SM are not withdrawn and continue to be approved for compliance monitoring. In addition, EPA is approving two new methods, EPA 515.3 and ASTM D5317-93, for acid herbicides. EPA is not withdrawing approval of EPA 515.1 or 515.2 for determination of acid herbicides because these methods are not obsolete.

EPA is approving the use of a new membrane filter medium, MI Agar, for the determination of the presence of total coliforms and *E. Coli* in drinking water under the Total Coliform Rule (TCR). MI Agar is also approved for the enumeration of total coliforms in source water under the Surface Water Treatment Rule (SWTR). EPA is approving two new tests, m-ColiBlue24® and E*Colite®, for the simultaneous detection of total coliform and *E. coli* in drinking water under the TCR. The rule requires that microbiological source water samples collected under the SWTR for the determination of coliform and fecal coliform or for determination of heterotrophic bacteria in distribution system samples be held below 10°C during transit and storage.

EPA is allowing a choice of six methods (ASTM D 511-93 A and B, EPA 200.7, and SM 3111 B SM 3120 B and 3500 Mg E) for determination of magnesium. Magnesium determinations will be required of systems that elect to use the magnesium control alternative to the total organic carbon removal requirements of the 1998 Stage One Disinfection By-Products Rule.

EPA is also approving use of Palintest Method1001 for determinations of total lead under the Lead and Copper Rule. The Palintest method uses a differential pulse anodic stripping

voltammetry technique which requires an acid digestion regardless of the turbidity of the sample.

This rule makes minor technical corrections and clarifications to the regulations. The rule:

- (1) clarifies that usually one may have up to 14-days from the date of the second analysis to report follow-up composite sample analyses,
- (2) amends the holding times for asbestos, nitrate and total nitrate that are specified in the table at §141.23(k)(2),
- (3) changes 2,4-D to “2,4-D as acid salt and ester” in the table at §141.24(e),
- (4) clarifies that the acceptance limits for successfully measuring chemical analytes in a performance evaluation (PE) sample apply only if that analyte has been added to the PE sample
- (5) amends §141.28 to allow for field or laboratory determinations of alkalinity, calcium, conductivity, orthophosphate and silica in drinking water samples by any person acceptable to the State to conduct these determinations and
- (6) amends the regulations to codify some of the provisions in the Fourth Edition of the Drinking Water Laboratory Certification Manual (1997). These amendments include a requirement to demonstrate proficiency by successful analysis of a PE sample each year for chemical contaminants using the same analytical method that is used to report compliance monitoring results.

This rule also recommends additional methods for monitoring of chloride and sulfate which are regulated under the National Secondary Drinking Water Regulations.

For more information, contact the Safe Drinking Water Hotline, (800) 426-4791.