

ENVIRONMENTAL PROTECTION AGENCY**40 CFR Part 141**

[WH-FRL-5349-6]

National Primary and Secondary Drinking Water Regulations: Analytical Methods for Regulated Drinking Water Contaminants

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule; technical corrections.

SUMMARY: EPA is amending the National Primary Drinking Water Regulations to correct typographical errors and minor technical mistakes or omissions.

EFFECTIVE DATE: These corrections are effective June 29, 1995.

FOR FURTHER INFORMATION CONTACT: Dr. Jitendra Saxena, Drinking Water Standards Division, Office of Ground Water and Drinking Water (4603), U.S. Environmental Protection Agency, 401 M Street, SW., Washington, DC 20460, (202) 260-9579.

SUPPLEMENTARY INFORMATION: In 1994, EPA promulgated the use of several new methods and updated versions of previously approved methods, and withdrew outdated methods for analysis of contaminants in drinking water (59 FR 62456, December 5, 1994). In 1992, EPA promulgated Maximum Contaminant Level Goals and National Primary Drinking Water Regulations for 23 contaminants (Phase V) (57 FR 31776, July 17, 1992). These regulations contained typographical and minor technical errors which are corrected by this rule.

The Administrative Procedures Act, 5 U.S.C. 553, provides that when an Agency finds good cause, it may issue a rule without first providing notice and comment and make the rule immediately effective. This rule corrects errors and omissions in 40 CFR 141. These revisions are very minor and the Agency believes that neither comment nor a delayed effective date is necessary or in the public interest. Accordingly, EPA finds that there is good cause not to solicit comment on this rule and to have the revisions immediately effective.

Corrections to the Regulation

This rule corrects errors in the regulatory language. These corrections are described below:

This rule corrects an omission from footnote 1 to the table in § 141.21(f)(3) by adding a line about storage temperature for samples. The preamble to the final rule (59 FR 62456, December

5, 1994) states that a footnote specifying coliform sample transit time and temperature would be added at § 141.21(f)(3). However, footnote 1 in the final rule covers transit time but omits transit temperature. The revised footnote encourages but does not require systems to hold samples at 10°C. This rule also corrects footnote 2 to the table in § 141.21(f)(3) by adding "and false-negative rate" after "false-positive rate". In deciding if lactose broth as commercially available may be used in lieu of lauryl tryptose broth, both false-positive rate and false-negative rates should be less than 10 percent. The false-negative rate was inadvertently omitted.

This rule makes a correction to the table in § 141.23(k)(1) by changing the analytical method for temperature from 2550B to 2550. The method citation 2550B refers to the second paragraph of Method 2550. Because the first paragraph (paragraph A) contains relevant introductory description, the complete method will be cited as 2550. Reference to Standard Method 2550 throughout the regulatory language should be helpful to avoid confusion.

This rule makes correction to the table in § 141.23(k)(4) by deleting footnote 1. The first sentence in the footnote explained an option to ice samples. The second sentence explained a requirement already contained in the method. Because both sentences can be understood from the method itself, the footnote is redundant and is removed. As a result the remaining footnotes and superscripts in the table referring to footnotes are renumbered. This rule also corrects a typographical error in the table by changing NAOH to NaOH in the preservative column for the contaminant cyanide.

This rule corrects the table in § 141.24(h)(18) by changing Dibromochloropropane (DBCP) to 1,2-Dibromo-3-chloropropane (DBCP). The name of the compound as given in the table covers more than one isomer while the method for DBCP actually measures this specific isomer. The correction in no way affects the ease or difficulty in achieving detection limit for DBCP.

This rule corrects an inadvertent deletion that occurred in the December 5, 1995 document. Today's rule restores the trihalomethane (THM) sampling instructions and maximum total trihalomethane (TTHM) potential instructions previously contained in § 141.30. Part III of Appendix C of § 141.30 has been modified to remove reference to EPA methods 501.1 and 501.2 which were withdrawn. The modified text is no longer called Part III of Appendix C; it is now included as

§ 141.30(g). Section 141.30(c)(1) has also been amended to include reference to the procedure for maximum TTHM potential.

The rule corrects an omission in footnote 2 to the table in § 141.74(a)(1) by adding a line about storage temperature for samples. The revised footnote encourages but does not require systems to hold samples at 10°C. An omission in footnote 2 to the table in § 141.74(a)(1) has been corrected by adding the term "and false-negative rate" after "false-positive rate." The rationales for these corrections are provided earlier in the section discussing similar corrections to § 141.21(f)(3).

The introductory part of § 141.74(a)(1) has been revised to refer to § 141.23(k)(1) for temperature measurement methodology. This is being done for clarity. As a result of this revision, EPA is deleting the reference to temperature in the table in § 141.74(a)(1). This rule also corrects several typographical errors in the table in § 141.74(a)(1). The corrections include: Addition of superscript 2 on total coliform and on fecal coliform for reference to footnote 2, moving the numbers 3,4,5 next to total coliform fermentation technique from their current position to superscript position, deleting "MPN" from the methodology entitled "Fecal Coliform MPN Procedure" consistent with editorial changes in the 18th edition of *Standard Methods for the Examination of Water and Wastewater, 1992*, changing "Fecal Coliforms" to "Fecal Coliform", and changing Heterotrophic to Heterotrophic.

Regulation Assessment Requirements**A. Executive Order 12866**

Under Executive Order 12866 (58 FR 51735; October 4, 1993), the Agency must determine whether the regulatory action is "significant" and therefore subject to OMB review and the requirements of the executive order. The order defines "significant regulatory action" as one that is likely to result in a rule that may: (1) Have an annual effect on the economy of \$100 million or more, or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities; (2) Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency; (3) Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of

recipients thereof; or (4) Raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the executive order.

This rule makes only technical and typographical corrections in a previous rule. Therefore, this rule is not a "significant regulatory action" under the terms of Executive Order 12866 and is therefore not subject to OMB review.

B. Regulatory Flexibility Act

The Regulatory Flexibility Act requires EPA to explicitly consider the effect of these regulations on small entities. By policy, EPA has decided to consider regulatory alternatives if there is any economic impact on any small entities. This rule does not impose additional requirements, it only makes minor technical and typographical corrections in previous rules.

C. Paperwork Reduction Act

The rule contains no requests for information and consequently is not subject to the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.*

D. Unfunded Mandate Reform Act

Title II of the Unfunded Mandate Reform Act of 1995 (UMRA), Pub. L. 104-4, establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, local, and tribal governments and the private sector. Under section 202 of the UMRA, EPA generally must prepare a written statement, including a cost-benefit analysis, for proposed and final rules with "Federal mandates" that may result in expenditures to State, local, or tribal governments, in the aggregate, or to the private sector, of \$100 million or more in any one year. When such a statement is needed for an EPA rule, section 205 of the UMRA generally requires EPA to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, more cost-effective or least burdensome

alternative that achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows EPA to adopt an alternative other than the least costly, most cost-effective or least burdensome alternative if the Administrator publishes with the final rule an explanation why that alternative was not adopted. Before EPA establishes any regulatory requirements that may significantly or uniquely affect small governments, including tribal governments, it must have developed under section 203 of the UMRA a small government agency plan. The plan must provide for notifying potentially affected small governments, giving them meaningful and timely input in the development of EPA regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising them on compliance with the regulatory requirements.

Today's rule contains no Federal mandates (under the regulatory provisions of Title II of the UMRA) for State, local, and tribal governments or the private sector because the rule merely corrects typographical errors and minor technical mistakes or omissions. Thus today's rule is not subject to the requirements of sections 202 and 205 of the UMRA. For the same reason, EPA has determined that this rule contains no regulatory requirements that might significantly or uniquely affect small governments.

List of Subjects in 40 CFR Part 141

Environmental protection, Chemicals, Analytical methods, Water supply.

Dated: June 23, 1995.

Dana D. Minerva,
Deputy Assistant Administrator, Office of Water.

For the reasons set forth in the preamble, part 141 of chapter I, title 40

of the Code of Federal Regulations is amended as follows:

PART 141—NATIONAL PRIMARY DRINKING WATER REGULATIONS

1. The authority citation for part 141 continues to read as follows:

Authority: 42 U.S.C. 300f, 300g-1, 300g-2, 300g-3, 300g-4, 300g-5, 300g-6, 300j-4, 300j-9.

2. Section 141.21 is amended by revising footnotes 1 and 2 to the table in paragraph (f)(3) to read as follows:

§ 141.21 Coliform sampling.

- * * * * *
- (f) * * *
- (3) * * *

¹ The time from sample collection to initiation of analysis may not exceed 30 hours. Systems are encouraged but not required to hold samples below 10°C during transit.

² Lactose broth, as commercially available, may be used in lieu of laurel tryptose broth, if the system conducts at least 25 parallel tests between this medium and lauryl tryptose broth using the water normally tested, and this comparison demonstrates that the false-positive rate and false-negative rate for total coliforms, using lactose broth, is less than 10 percent.

* * * * *

3. In the table in § 141.23(k)(1) the entry "temperature" in the contaminant column is amended by revising the entry "2550B" to read "2550" in the SM column.

4. The table in § 141.23(k)(2) is amended by removing footnote 1 and redesignating footnotes 2 through 4 as footnotes 1 through 3 respectively and by revising the entry for "cyanide" to read as follows:

§ 141.23 Inorganic chemical sampling for analytical requirements.

- * * * * *
- (k) * * *
- (2) * * *

Contaminant	Preservative	Container ¹	Time ²
Cyanide	Cool, 4°C, NaOH to pH>12 ³	P or G	14 days
*	*	*	*

¹ P=plastic, hard or soft; G=glass, hard or soft.
² In all cases, samples should be analyzed as soon after collection as possible.
³ See method(s) for the information for preservation.

* * * * *

§ 141.24 [Amended]

5. The table in § 141.24(h)(18) is amended by revising the contaminant "Dibromochloropropane (DBCP)" to

read "1,2-Dibromo-3-chloropropane (DBCP)".

6. Section 141.30 is amended by revising the second sentence in paragraph (c)(1) and revising paragraph

(e), and adding a new paragraph (g) to read as follows:

§ 141.30 Total trihalomethane sampling, analytical and other requirements.

* * * * *

(c) * * *
 (1) * * * The system shall submit the results of at least one sample for maximum TTHM potential using the procedure specified in paragraph (g) of this section. A sample must be analyzed from each treatment plant used by the system and be taken at a point in the distribution system reflecting the maximum residence time of the water in the system. * * *

(e) Sampling and analyses made pursuant to this section shall be conducted by one of the total trihalomethane methods as directed in § 141.24(e), and the *Technical Notes on Drinking Water Methods*, EPA-600/R-94-173, October 1994, which is available from NTIS, PB-104766. Samples for TTHM shall be dechlorinated upon collection to prevent further production of trihalomethanes, according to the procedures described in the methods, except acidification is not required if only THMs or TTHMs are to be determined. Samples for maximum TTHM potential should not be dechlorinated or acidified, and should

be held for seven days at 25°C (or above) prior to analysis.

* * * * *
 (g) The water sample for determination of maximum total trihalomethane potential is taken from a point in the distribution system that reflects maximum residence time. Procedures for sample collection and handling are given in the methods. No reducing agent is added to "quench" the chemical reaction producing THMs at the time of sample collection. The intent is to permit the level of THM precursors to be depleted and the concentration of THMs to be maximized for the supply being tested. Four experimental parameters affecting maximum THM production are pH, temperature, reaction time and the presence of a disinfectant residual. These parameters are dealt with as follows: Measure the disinfectant residual at the selected sampling point. Proceed only if a measurable disinfectant residual is present. Collect triplicate 40 ml water samples at the pH prevailing at the time of sampling, and prepare a method blank according to the methods. Seal and store these samples together for

seven days at 25°C or above. After this time period, open one of the sample containers and check for disinfectant residual. Absence of a disinfectant residual invalidates the sample for further analysis. Once a disinfectant residual has been demonstrated, open another of the sealed samples and determine total THM concentration using an approved analytical method.

7. Section 141.74 is amended by revising paragraph (a)(1) to read as follows:

§ 141.74 Analytical and monitoring requirements.

(a) * * *
 (1) Public water systems must conduct analysis of pH and temperature in accordance with one of the methods listed at § 141.23(k)(1). Public water systems must conduct analysis of total coliforms, fecal coliforms, heterotrophic bacteria, and turbidity in accordance with one of the following analytical methods and by using analytical test procedures contained in *Technical Notes on Drinking Water Methods*, EPA-600/R-94-173, October 1994, which is available at NTIS PB95-104766.

Organism	Methodology	Citation ¹
Total Coliforms ²	Total Coliform fermentation Technique ^{3,4,5}	9221A, B, C
	Total coliform membrane filter technique	9222A, B, C
	ONPG-mug test membrane ⁶	9223
Fecal Coli forms ²	Fecal Coliform Procedure ⁷	9221E
	Fecal Coliform filter procedure	9222D
Heterotrophic bacteria ²	Pour Plate method	9215B
Turbidity	Nephelometric method	2130B
	Nephelometric method	180.1 ⁸
	Great Lakes instruments	Method 2 ⁹

¹ Except where noted, all methods refer to the 18th edition of *Standard Methods for the Examination of Water and Wastewater*, 1992, American Public Health Association, 1015 Fifteenth Street NW, Washington, D.C. 20005.
² The time from sample collection to initiation of analysis may not exceed 8 hours. Systems are encouraged but not required to hold samples below 10°C during transit.
³ Lactose broth, as commercially available, may be used in lieu of lauryl tryptose broth, if the system conducts at least 25 parallel tests between this medium and lauryl tryptose broth using the water normally tested, and this comparison demonstrates that the false positive rate and false negative rate for total coliforms, using lactose broth, is less than 10 percent.
⁴ Media should cover inverted tubes at least one-half to two-thirds after the sample is added.
⁵ No requirement exists to run the completed phase on 10 percent of all total coliform-positive confirmed tubes.
⁶ The ONPG-MUG Test is also known as the Autoanalysis Colilert System.
⁷ A-1 Broth may be held up to three months in a tightly closed screwcap tube at 4°C.
⁸ "Methods for the Determination of Inorganic Substances in Environmental Samples", EPA-600/R-93-100, August 1993. Available at NTIS, PB94-121811.
⁹ GLI Method 2, "Turbidity", November 2, 1992, Great Lakes Instruments, Inc., 8855 North 55th Street, Milwaukee, Wisconsin 53223.