ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 141

[WH–FRL–6218–7]

National Primary Drinking Water Regulations: Analytical Methods for Microbes, Lead, and Magnesium

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: On July 31, 1998, EPA proposed changes relating to analytical test methods for the measurement of total coliforms, *Escherichia coli*, and pesticides (63 FR 41134). Consistent with that proposal, the Agency is proposing to approve two new analytical methods, the E*Colite test and ColiBlue24 test, as options for detecting total coliforms and *E. coli* in drinking water. Both organisms must be monitored under EPA's drinking water regulations on total coliforms. In addition, the Agency is also proposing to approve a new lead method. By today's action, EPA is making available to the public studies that demonstrate that these three methods are at least as good as EPA's previously approved methods for detecting total coliform bacteria and *E. coli*, and lead, in drinking water. The Agency evaluated data on the two coliform methods and one lead method and found them to be at least as good as EPA's ''reference'' methods.

In addition to these three tests, the Agency proposes six analytical methods for magnesium. This action compensates for an omission in the Stage 1 Disinfectants and Disinfection Byproducts (DBP) Rule, which was promulgated on November 30, 1998. The DBP Rule allows certain surface water systems that are unable to achieve the specified level of total organic carbon removal to meet instead one of several alternative performance criteria, including the removal of 10 mg/L magnesium hardness from source water. The rule, however, does not include any analytical methods for magnesium.

EPA invites public comment on whether the Agency should approve the E*Colite test and ColiBlue24 test for total coliforms and *E. coli*, the lead method, and the six magnesium methods.

DATES: Written comments should be postmarked, delivered by hand, or electronically mailed on or before March 1, 1999.

ADDRESSES: Any person may submit written or electronic comments on these new data supporting the earlier proposed rule, described below. Written comments may be sent to the W–98–27 Drinking Water Analytical Methods Clerk, U.S. Environmental Protection Agency, Water Docket, MC 4101, 401 M Street, SW, Washington, DC 20460. EPA would appreciate an original and 3 copies of your comments and enclosures (including references, if cited). Commenters should use a separate paragraph for each method or issue discussed. No facsimiles (faxes) will be accepted because EPA cannot ensure their submission to the Water Docket. Commenters who would like acknowledgment of receipt of their comments should include a self-addressed, stamped envelope.

Electronic comments should be sent to the Internet address: ow-docket@epamail.epa.gov. Avoid use of special characters and any form of encryption. EPA will attempt to clarify electronic comments if a transmission error occurs. Comments provided electronically will be considered timely if they are submitted electronically by 11:59 p.m. (Eastern time) on March 1, 1999. Commenters may also provide disks. If comments are sent via the Internet or on disks, they must be formatted in WordPerfect 5.1 or 6.1, or ASCII, and identified by the docket number W–98–27. A printout of the electronic comments will be filed for the official record.

The record for this rulemaking has been established under docket number W–98–27. Copies of the supporting documents (including references and methods cited in this document) are available for review at the U.S. Environmental Protection Agency, Water Docket, EB 57, 401 M Street, SW, Washington, DC 20460. For access to the docket materials, call 202–260–3027 on Monday through Friday, excluding Federal holidays, between 9 a.m. and 3:30 p.m. Eastern Time for an appointment. Today's **Federal Register** document has been placed on the Internet for public review and downloading at the following location: http://www.epa.gov/fedrgstr.

FOR FURTHER INFORMATION CONTACT: EPA Safe Drinking Water Hotline, for general information. Callers within the United States may reach the Hotline at 800–426–4791. The Hotline is open Monday through Friday, excluding Federal holidays, from 9 a.m. to 5:30 p.m. Eastern Time.

For technical information regarding microbiology methods, contact Paul S. Berger, Ph.D., Office of Ground Water and Drinking Water (MC–4607), U.S. Environmental Protection Agency, Washington, DC 20460, telephone 202–260–3039. For technical information regarding chemistry methods, contact Dan Schmelling, Office of Ground Water and Drinking Water (MC–4607), U.S. Environmental Protection Agency, Washington, DC 20460, telephone 202–260–1439.

SUPPLEMENTARY INFORMATION:

I. Regulated Entities

Entities potentially regulated by this action are listed below:

Category	Example of regulated entities
Industry	(1) All water systems that serve at least 25 year-round residents or have at least 15 service connections used by year-round residents (Community water system). (2) All water systems that regularly serve at least 25 of the same persons over 6 months per year, but not year-round (Non-transient, non-community water system). (3) All water systems that serve at least 25 people daily for at least 60 days during a year, but less than 6 months (Transient, non-community water systems).
State, Local, and Tribal Governments	Same as above.
Federal Government	Same as above.

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be regulated by this action. This table lists the types of entities that EPA is now aware could potentially be regulated by this action. Other types of entities not listed in the table could also be regulated. To determine whether your facility is regulated by this action, you should carefully examine the applicability of current drinking water standards and monitoring requirements in § 141.21 for coliforms and § 141.80 for lead of title 40 of the Code of Federal Regulations, and § 141.135(a)(3) of the **Federal Register** for the Stage 1 DBP Rule. If you have questions regarding

the applicability of this action to a particular entity, consult one of the persons listed in the **FOR FURTHER INFORMATION CONTACT** section.

II. Explanation of Today's Actions

On July 31, 1998, EPA proposed to approve analytical methods for several pesticides and microbial contaminants (total coliforms and *E. coli*) for compliance with the maximum contaminant levels for these contaminants under the Safe Drinking Water Act at 63 FR 41134. Today's proposed rule would approve two additional methods for total coliforms and *E. coli*, and one additional method for lead. If approved, laboratories may either use these tests or any other EPA-approved test for total coliforms or *E. coli*, and lead, in drinking water.

In addition, on July 29, 1994, the Agency proposed the Stage 1 DBP Rule at 59 FR 38668, and promulgated the rule on November 30, 1998. The DBP Rule requires subpart H systems (public water systems covered by EPA's Surface Water Treatment Rule) that use conventional treatment to remove total organic carbon (TOC) by enhanced coagulation or enhanced softening. For systems practicing enhanced softening that cannot achieve the specified level of TOC removal, the rule allows such systems to meet instead one of several alternative performance criteria, including the removal of 10 mg/L magnesium hardness (as $CaCO_3$) from the source water. Analytical methods for TOC were described in the proposed rule and a subsequent NODA at 62 FR 59388 (Nov. 3, 1997). However, the rule omitted analytical test methods for magnesium. Today's proposed rule compensates for this omission by identifying several such methods for magnesium and providing an opportunity for comment. For all methods in today's proposal, the Agency intends to seek approval from the Office of the Federal Register in order to incorporate the methods by reference in the final rule.

On October 6, 1997, EPA published a notice of the Agency's intent to implement a Performance Based Measurement System (PBMS) in all of its programs to the extent feasible (62 FR 52098). The Agency is currently determining the specific steps necessary to implement PBMS in its programs and preparing an implementation plan. As part of this process, EPA is currently evaluating what relevant performance characteristics should be specified for monitoring methods used in the water programs under a PBMS approach to ensure adequate data quality. EPA would then specify performance requirements in its regulations to ensure that any method used for determination of a regulated analyte is at least equivalent to the performance achieved by other currently approved methods. EPA expects to publish its PBMS implementation strategy for water programs in the **Federal Register** in the early calendar year 1999.

Once EPA has made its final determinations regarding implementation of PBMS in programs under the Safe Drinking Water Act, EPA would incorporate specific provisions of PBMS into its regulations, which may include specification of the performance characteristics for measurement of regulated contaminants in the drinking water program regulations. In addition to requesting comment on the methods described below, EPA is also seeking comment on the application of PBMS in its Drinking Water program and on the establishment of performance characteristics for the methods addressed in this document.

1. Methods for Total Coliforms and E. coli

EPA is proposing to approve the following total coliform/ *E. coli* methods that would be used for demonstrating compliance with the Total Coliform Rule.

a. E*Colite Test

The E*Colite test simultaneously determines the presence of total coliforms and *E. coli*, both of which must be monitored under the Total Coliform Rule at 40 CFR 141.21. The E*Colite test involves a dehydrated medium to which a 100-mL water sample is added. The test consists of a packaged sterile burst-a-seal bag divided into three compartments. The upper compartment is used for sample collection and optionally contains a sodium thiosulfate tablet to eliminate free chlorine and/or bromine in the water. The middle compartment of the bag contains the medium for growth and enzyme substrates for detection of total coliforms and E. coli. The lower compartment optionally holds a bactericide (a quaternary amine) that the analyst can introduce to kill the grown coliforms.

First, a 100-mL water sample is added to the upper compartment and the bag sealed. Then the water sample is pushed through the burst-a-seal into the medium, and the two are mixed. The bag is then incubated for 28 hours at 35°C (the bag may first need to be placed in a 35°C water bath for 10 minutes to bring the sample up to incubation temperature quickly). After incubation, the bag is observed for the presence of a blue/green color. If present, the sample is total coliform-positive. If the blue/green color is also fluorescent under an ultraviolet light (366 nm), the sample is *E. coli*-positive. If the blue/green sample does not fluoresce after 28 hours, the sample should be incubated an additional 20 hours (total 48 hours of incubation), and checked again for fluorescence.

The E*Colite test is based on the detection of two enzymes: beta-D-galactosidase and beta-D-glucuronidase, which are characteristic of the total coliform group and *E. coli*, respectively. Coliforms produce beta-D-galactosidase, which hydrolyzes X-GAL in the medium to produce a blue chromogen. E. coli produces beta-D-glucuronidase, which hydrolyzes 4-methylumbelliferyl-beta-D-glucuronide (MUG) in the medium that releases a fluorescent compound.

EPA has statistically evaluated comparability data submitted by the manufacturer, and has determined that results obtained with the E*Colite test are not statistically different from the Agency's reference method for total coliforms and *E. coli*. The manufacturer observed a false-positive error of 16.0% and 7.2% for total coliforms and *E. coli*, respectively. The false-negative rate, respectively, was 3.7% and 9.2%. Based on these results, EPA believes that the E*Colite test is satisfactory as a compliance method for total coliforms and *E. coli*.

The method description for E*Colite test is available from Charm Sciences, Inc., 36 Franklin Street, Malden, MA 02148–4120. Their telephone number is (781) 322–1523. This information is also available in the docket for today's document.

b. ColiBlue24 Test

The ColiBlue24 test is a membrane filtration method that simultaneously determines the presence or absence of total coliforms and *E. coli*, both of which must be monitored under the Total Coliform Rule (40 CFR 141.21). The test involves filtering a 100-mL drinking water sample through a 47-mm membrane filter which is transferred to a 50-mm petri plate containing an absorbent pad saturated with M-ColiBlue24 Broth. After incubation at 35°C for 22±2 hours, the membrane is examined for colony growth. The presence of total coliforms is indicated by red colonies; if *E. coli* is also present, blue colonies will be observed.

M-ColiBlue24 Broth is a nutritive lactose-based medium containing inhibitors to eliminate growth of non-coliforms. Total coliform colonies growing on the medium are identified

by a nonselective dye, 2,3,5-triphenoltetrazolium chloride (TCC), which produces red colonies. The selective identification of E. coli is based on the detection of the beta-glucuronidase enzyme. The test medium includes the chromogen 5-bromo-4-chloro-3-indoxyl-beta-D-glucuronide (BCIG) which is hydrolyzed by the enzyme, releasing an insoluble indoxyl salt that produces blue colonies.

EPA has statistically evaluated comparability data submitted by the manufacturer, and has determined that the ColiBlue24 test is not statistically different from the Agency's reference method for total coliforms and *E. coli.* With regard to specificity, 25 different water samples from seven different geographical locations were analyzed for total coliforms and *E. coli* by the ColiBlue24 test and the reference methods. Positive and negative cultures were then validated by standard tests. These results indicated that ColiBlue24 had a false positive rate of 26.8% and 2.5% for total coliforms and *E. coli*, respectively. The false negative rate was 1.6% and 0%, respectively. Using M-Endo LES as a comparison to M-ColiBlue24 for total coliform specificity, the M-Endo false positive error was 29.6% and the undetected target error was 3.4%. EPA believes that these results show that the specificity of the ColiBlue24 test for total coliforms and *E. coli* is reasonable.

With regard to performance comparability, investigators analyzed 10 samples spiked with wastewater from 10 different sites and compared the ColiBlue24 method with EPA's reference methods for the detection of chlorine-injured total coliforms and E. coli. The results indicate that detection of total coliforms and *E. coli* by ColiBlue24 does not differ significantly from the standard method and that this conclusion is consistent across all samples. After 24 hours, the ColiBlue24 test had an average of 1.07 times more total coliform-positive responses than the reference method and 1.01 times more *E. coli*-positive responses than the reference method. This study suggests that the ColiBlue24 test could recover chlorine-injured coliforms as well as EPA's reference methods. The above studies suggest that the ColiBlue24 test performs satisfactorily and its performance is at least as good as the reference methods for total coliforms and *E. coli.*

The method description for ColiBlue24 Test is available from the Hach Company, 100 Dayton Avenue, Ames, IA 50010. Their telephone number is (515) 232–2533. Of course, this information is also available in the docket for today's document.

2. Magnesium Tests

Today's notice proposes to approve six magnesium methods, which are grouped into the following three analytical techniques. These methods would be used to demonstrate compliance with the treatment requirements of the Stage 1 DBP Rule.

a. Atomic Absorption (AA) Spectrophotometric Methods ((Standard Method 3500-Mg B (APHA, 1995) and ASTM D 511–93 B (ASTM, 1998))

In the measurement of magnesium by atomic absorption spectrometry, a sample is aspirated into a flame and atomized. Addition of interference-suppressing agents may be necessary. A light beam is directed through the flame, into a filter or monochromator set at 285.2 nm, and onto a detector which determines the light absorbed by the magnesium. The concentration of magnesium is proportional to absorbance within the linear range of the instrument. These methods are generally applicable to magnesium concentrations in the range 0.02–3.0 mg/L, depending on the instrument and method employed. Higher concentrations may be analyzed by dilution of the sample prior to analysis.

b. Inductively Coupled Plasma (ICP) Methods ((Standard Method 3500-Mg C (APHA, 1995) and EPA Method 200.7 (EPA, 1994))

An ICP source consists of a stream of argon gas ionized by an applied radio frequency field. This field is inductively coupled to the ionized gas by a coil surrounding a quartz torch that supports and confines the plasma. Analysis of magnesium by ICP involves generation of a sample aerosol in a nebulizer and subsequent injection into the ICP. This subjects the constituent atoms to temperatures of 6000 to 8000 °K, resulting in almost complete dissociation of molecules and excitation of atomic emission. A portion of the emission spectrum (usually 279.08 or 279.55 nm for magnesium) from the ICP is isolated for intensity measurement. The efficient excitation provided by the ICP results in low detection limits and the linear range of the instrument may span four orders of magnitude (APHA 1995).

c. Complexation Titrametric Methods (Standard Method 3500–Mg E (APHA 1995) and ASTM D 511–93 A (ASTM 1998))

These methods measure magnesium as the difference between hardness (equal to calcium plus magnesium) and calcium. Hardness is measured by titration of a sample with EDTA (ethylenediamine tetraacetic acid)at pH 10. Calcium is determined by titration of a separate aliquot of sample with EDTA at a pH of 12–13, where the magnesium is precipitated. A chemical indicator is added to the sample to allow observation of the endpoint. These methods are generally applicable in a range from 1 to 1000 mg/L of calcium plus magnesium expressed as calcium, but may fail in the analysis of highly colored waters or waters that contain high concentrations of metals (ASTM, 1998).

3. Test for Lead

Today's notice proposes the following lead method that would be used for demonstrating compliance with the monitoring requirement for lead in 40 CFR 141.89.

Method 1001: Lead in Drinking Water Differential Pulse Aniodic Stripping Voltammetry (DPAV)

This method is for the determination of dissolved and total recoverable lead in drinking water. For dissolved lead, a 125-mL sample is collected, passed through a 0.45 µm filter, and acidified to pH<2 prior to shipment to the laboratory. For total recoverable lead, the sample is acidified to pH<2 prior to shipment to the laboratory. Samples for total recoverable lead must be acid-digested before analysis. In either case (dissolved or total recoverable lead), A 50-mL aliquot of acid-preserved or acid-digested sample is neutralized with sodium hydroxide. A 5-mL portion of the neutralized sample is decanted to a sample tube, buffered to pH 4, and conditioned with an excess of supporting electrolyte to ensure the precision of the analysis. Then a decomplexing agent is added to release lead from polyphosphate complexes.

The lead in the conditioned sample is determined by DPAV using a precalibrated disposable sensor. The lead in the sample is concentrated by plating onto the working electrode of the disposable sensor and then it is stripped back into solution by raising the electrode potential. As the lead returns to solution, a peak of current is detected. The peak potential identifies the metal and the peak height is proportional to the concentration of the lead. The peak height is converted to micrograms per liter of lead by reference to calibration curves in the instrument software. Quality is assured through calibration and verification with external referenced standard solutions.

EPA has statistically evaluated comparability data submitted by the manufacturer, and has determined that the results using the DPAV method described above are not statistically different from the Agency's reference methods for lead (without sample compositing). The manufacturer observed a method detection limit of 2 µg/L lead. The standard deviation of replicate observations (n=10) of a calibration standard containing 15 µg/L lead was 0.75 µg/L. With multiple batches of tablet reagents and sensors, the relative standard deviation of sets of observations (n=10) containing 15 g/L lead varied from 2.1 to 3.8%. A drinking water sample initially containing 8 µg/L lead, was fortified to a total concentration of 48 µg/L. The mean percent recovery of the added 40 g/L lead was 110% and the corresponding standard deviation of the percent recoveries of multiple analyses was 1.5%. Similar recoveries were obtained from other drinking water matrices.

The description for Method 1001 for Lead in Drinking Water Differential Pulse Aniodic Stripping Voltammetry is available from Palintest LTD, 21 Kenton Lands Road, PO Box 18395, Erlanger, KY 41018. The telephone number is (606) 341–7423.

II. 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.

It has been determined that today's proposal 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 (RFA)

Under the Regulatory Flexibility Act (RFA), 5 U.S.C. 601 et seq., as amended by SBREFA, EPA generally is required to conduct a regulatory flexibility analysis describing the impact of the regulatory action on small entities as part of rulemaking. However, under section 605(b) of the RFA, if EPA certifies that the rule will not have a significant economic impact on a substantial number of small entities, EPA is not required to prepare a regulatory flexibility analysis.

The Small Business Administration (SBA) defines a small business as 50,000 or less. However, the RFA allows an Agency to use an alternative definition of ''small'' if that Agency has consulted with the SBA on the alternative definition and has proposed the alternative in the **Federal Register** and taken public comment. EPA defines small entities as those public water systems serving 10,000 or fewer customers. In accordance with the RFA requirements, EPA consulted with the SBA on this definition and proposed the definition in the **Federal Register** (63 FR 7620–7621; February 13, 1998). EPA finalized this definition in the final Consumer Confidence Report regulation on August 19, 1998 (63 FR 44524–44525).

This proposed rule would provide public water systems additional options for detecting total coliforms and *E. coli* under the Total Coliform Rule and for measuring lead under the Lead and Copper rule. It would also allow certain systems using softening to analyze for magnesium under the DBP Rule, if they are unable to meet the the specified level of total organic carbon removal. The rule would not impose additional requirements. Therefore, pursuant to section 605(b) of the RFA, 5 U.S.C. 605(b), the Agency certifies that this proposal would not have a significant economic impact on a substantial number of small entities.

C. Unfunded Mandates Reform Act

Title II of the Unfunded Mandates 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, and tribal governments, in the aggregate, or to the private sector, of $100 million or more in any one year. Before promulgating an EPA rule for which a written statement is needed, section 205 of the UMRA generally requires EPA to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most 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.

In addition, 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, enabling officials of affected small governments to have meaningful and timely input in the development of EPA regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising small governments on compliance with the regulatory requirements.

Today's rule contains no Federal mandate under the regulatory provisions of Title II of the UMRA, because it would impose no enforceable ''duty'' on any State, local, or tribal governments or the private sector. Moreover, the rule would not contain any Federal mandate that would result in expenditures of $100 million or more by State, local, and tribal governments, in the aggregate, or by the private sector, in any one year. The rule would merely approve use of additional analytical methods for total coliforms and *E. coli* under the Total Coliform Rule and an additional method for lead under the Lead and Copper Rule. Systems would be able to choose between already approved methods for total coliforms/*E. coli* and lead and the new methods. The proposed rule would also approve six methods for magnesium under the Stage 1 DBP Rule, allowing certain systems using softening that are unable to meet the specified level of total organic carbon removal to analyze for magnesium instead. EPA estimates that the cost of a magnesium analysis should not exceed $20 per sample; systems analyzing magnesium under the DBP Rule would be required to collect 24 samples per year, which would cost no more than $20 × 24= $480 per year. EPA

believes that less than 1% of the 1,395 surface water systems covered by the DBP Rule will choose to monitor for magnesium. Therefore, today's proposal is not subject to the requirements of sections 202 and 205 of the UMRA. In addition, this action contains no regulatory requirements that might significantly or uniquely affect small governments. Therefore, it is not subject to section 203 of the UMRA.

D. Paperwork Reduction Act

In accordance with the Paperwork Reduction Act of 1995, 44 U.S.C.3501 et seq., EPA must submit an information collection request covering information collection requirements in a rule to the Office of Management and Budget for review and approval. This proposed rulemaking does not contain any information collection requirements, and therefore is not covered under the Paperwork Reduction Act. Therefore, preparation of an information collection request to accompany this document is unnecessary.

E. Science Advisory Board and National Drinking Water Advisory Council, and Secretary of Health and Human Services

In accordance with section 1412 (d) and (e) of the SDWA, the Agency is submitting this proposal to the Science Advisory Board, the National Drinking Water Advisory Council, and the Secretary of Health and Human Services for their review.

F. National Technology Transfer and Advancement Act (NTTAA)

Under section 12(d) of the NTTAA, the Agency is required to use voluntary consensus standards in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., material specifications, test methods, sampling procedures, business practices, etc.) that are developed or adopted by voluntary consensus standard bodies. Where available and potentially applicable voluntary consensus standards are not used by EPA, the Act requires the Agency to provide Congress, through OMB, an explanation for the reasons for not using such standards.

In preparing today's proposed rule, EPA searched for consensus methods that would be acceptable for compliance determinations under the SDWA for the measurement of magnesium. EPA is proposing use of magnesium testing protocols in Standard Methods for the Examination of Water and Wastewater and ASTM because they are highly respected and widely used consensus references. By providing notice of the Agency's intention to approve these methods, the Agency also acts consistent with provisions of the NTTAA. This notice also is proposing to approve two new methods for detection of total coliforms and *E. coli*, and one method for lead, which are not yet consensus methods. However, EPA has previously approved consensus methods for coliforms and *E. coli* and lead, and the three new methods will be considered for incorporation into Standard Methods for the Examination of Water and Wastewater. EPA invites comments on the potential use of voluntary consensus standards in this notice, as well as identification and information about other voluntary consensus standards that the Agency could consider for the analysis of total coliforms, *E. coli*, lead, and magnesium under the SDWA.

G. Executive Order 13045—Protection of Children From Environmental Health Risks and Safety Risks

Executive Order 13045 applies to any rule that: (1) Is determined to be ''economically significant'' as defined under E.O. 12866, and (2) concerns an environmental health or safety risk that EPA has reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, the Agency must evaluate the environmental health or safety effects of the planned rule on children, and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the Agency.

This proposed rule is not subject to E.O. 13045 because it is not economically significant and does not concern a risk that EPA has reason to believe may have a disproportionate effect on children. Further, EPA interprets E.O. 13045 as applying only to those regulatory actions that are based on health or safety risks, such that the analysis required under section 5–501 of the Order has the potential to influence the regulation. This proposed rule is not subject to E.O. 13045 because it does not establish an environmental standard intended to mitigate health or safety risks.

H. Executive Order 12875—Enhancing the Intergovernment Partnership

Under Executive Order 12875, EPA may not issue a regulation that is not required by statute and that creates a mandate upon a State, local or tribal government, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by those governments, or EPA consults with those governments. If EPA complies by consulting, Executive Order 12875 requires EPA to provide to the Office of Management and Budget a description of the extent of EPA's prior consultation with representatives of affected State, local and tribal governments, the nature of their concerns, copies of any written communications from the governments, and a statement supporting the need to issue the regulations. In addition, Executive Order 12875 requires EPA to develop an effective process permitting elected officials and other representatives of State, local and tribal governments ''to provide meaningful and timely input in the development of regulatory proposals containing significant unfunded mandates.''

This rule would not create a mandate, or impose any enforceable duties, on State, local or tribal governments. It would merely provide additional options for analyzing water samples or, for the case of magnesium methods, allow certain systems under the D/DBP Rule to monitor for magnesium. Accordingly, the requirements of section 1(a) of Executive Order 12875 do not apply to this rule.

I. Executive Order 13084—Consultation and Coordination With Indian Tribal Governments

Under Executive Order 13084, EPA may not issue a regulation that is not required by statute, that significantly or uniquely affects the communities of Indian tribal governments, and that imposes substantial direct compliance costs on those communities, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by the tribal governments, or EPA consults with those governments. If EPA complies by consulting, Executive Order 13084 requires the Agency to provide to the Office of Management and Budget, in a separately identified section of the preamble to the rule, a description of the extent of EPA's prior consultation with representatives of affected tribal governments, a summary of the nature of their concerns, and a statement supporting the need to issue the regulation. In addition, Executive Order 13084 requires EPA to develop an effective process permitting elected officials and other representatives of Indian tribal governments ''to provide meaningful and timely input in the development of regulatory policies on matters that significantly or uniquely affect their communities.''

This rule would not significantly or uniquely affect the communities of Indian tribal governments. It would

impose no additional costs on such communities. It would merely provide additional options for analyzing water samples or, for the case of magnesium methods, allow certain systems under the D/DBP Rule to monitor for magnesium. Accordingly, the requirements of section 3(b) of Executive Order 13084 do not apply to this rule.

III. References

APHA. American Public Health Association. 1995. Standard Methods for the Examination of Water and Wastewater (19th ed.), 1015 Fifteenth Street NW, Washington, DC 20005.

ASTM. American Society for Testing and Materials. 1998. Annual Book of ASTM Methods, 1998, Vol. 11.01. 101 Barr Harbor Drive, West Conshohocken, PA 19428.

EPA. U.S. Environmental Protection Agency. 1994. Methods for the determination of metals in environmental samples—Supplement I. EPA–600/R–94–111.

List of Subjects in 40 CFR Part 141

Environmental protection, Analytical methods, Chemicals, Intergovernmental relations, Reporting and recordkeeping requirements, Water supply.

Dated: January 7, 1999.

Carol M. Browner,

Administrator.

For the reasons set out in the preamble, part 141 of chapter I title 40, Code of Federal Regulations, are proposed to be 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, and 300j–11.

2. In § 141.21, the Table in paragraph (f)(3) is revised to read as follows:

§ 141.21 Coliform sampling.

* * * * *

(f) * * *

(3) * * *

Organism	Methodology	Citation [1]
Total Coliforms [2]	Total Coliform Fermentation Technique [3, 4, 5]	9221A, B.
	Total Coliform Membrane Filter Technique [6]	9222A, B, C.
	Presence-Absence (P–A) Coliform Test [5, 7]	9221D.
	ONPG–MUG Test [8]	9223.
	Colisure Test [9]	
	E*Colite Test [10]	
	ColiBlue24 Test [11]	

The procedures shall be done in accordance with the documents listed below. The incorporation by reference of the following documents was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies of the documents may be obtained from the sources listed below. Information regarding obtaining these documents can be obtained from the Safe Drinking Water Hotline at 800–426–4791. Documents may be inspected at EPA's Drinking Water Docket, 401 M Street, SW, Washington, D.C. 20460 (Telephone: 202–260–3027); or at the Office of Federal Register, 800 North Capitol Street, NW, Suite 700, Washington, D.C. 20408.

[1] Methods 9221A,B, 9222A,B,C, 9221D and 9223 are contained in Standard Methods for the Examination of Water and Wastewater, 18th edition, 1992 and 19th edition, 1995, American Public Health Association, 1015 Fifteenth Street NW, Washington, D.C. 20005; either edition may be used.

[2] 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.

[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 coliform, using lactose broth, is less than 10 percent.

[4] If inverted tubes are used to detect gas production, the media should cover these 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] MI agar also may be used. Preparation and use of MI agar is set forth in the article, ''New medium for the simultaneous detection of total coliform and *Escherichia coli* in water'' by Brenner, K.P., et al., 1993, Appl. Environ. Microbiol. 59:3534–3544.

[7] Six-times formulation strength may be used if the medium is filter-sterilized rather than autoclaved.

[8] The ONPG–MUG Test is also known as the Autoanalysis Colilert System. A source for this test is referenced at § 141.21(f)(5)(iii).

[9] The Colisure Test must be incubated for 28 hours before examining the results. If an examination of the results at 28 hours is not convenient, then results may be examined at any time between 28 hours and 48 hours. A description of the Colisure Test may be obtained from the Millipore Corporation, Technical Services Department, 80 Ashby Road, Bedford, MA 01730.

[10] The method description for E*Colite Test is available from Charm Sciences, Inc., 36 Franklin Street, Malden, MA 02148–4120.

[11] The method description for ColiBlue24 Test is available from the Hach Company, 100 Dayton Avenue, Ames, IA 50010.

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3. In § 141.23, in paragraph (k)(1), the Table is amended by adding a new entry for ''magnesium'' and by adding a new methodology to the end of the entry for ''lead'' to read as follows:

§ 141.23 Inorganic chemical sampling and analytical requirements.

* * * * *

(k) * * *

(1) * * *

Contaminant	Methodology	EPA	ASTM	SM	Other
* * * * *	.....	.....	.....	.....	Method
Lead	* * * * *				
	Differential Pulse Aniodic Stripping Voltammetry	.....	.....	.....	1001.[13]
* * * * *	* * * * *	.....	D 511–93 B	3500-Mg B	
Magnesium	Atomic Absorption	200.7 [14]	.....	3500-Mg C	
	ICP	.....	D 511–93 A	3500-Mg E	

Contaminant	Methodology	EPA	ASTM	SM	Other
	Complexation Titrametric Methods				

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[13] The description for Method 1001 for lead is available from Palintest LTD, 21 Kenton Lands Road, PO Box 18395, Erlanger, KY 41018.

[14] The description for EPA Method 200.7 is found in Methods for the Determination of Metals in Environmental Samples—Supplement I (1994). EPA–600/R–94–111.

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