### ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 141, 142, and 143

[FRL-6334-8]

RIN 2040-AD06

### National Primary Drinking Water Regulations: Public Notification Rule

**AGENCY:** Environmental Protection

Agency (EPA).

**ACTION:** Proposed rule.

**SUMMARY:** EPA is proposing to revise the general public notification regulations for public water systems to implement the public notification requirements of the 1996 Safe Drinking Water Act (SDWA) amendments. The regulations set the requirements that public water systems must follow regarding the form, manner, frequency, and content of the public notice. Public notice of violations is an integral part of the public health protection and consumer right-to-know provisions of the 1996 SDWA amendments. The public notification requirements apply to owners and operators of public water systems which: fail to comply with the requirements of the National Primary Drinking Water Regulations (NPDWR); have a variance or exemption from the drinking water regulations; or are facing other situations posing risk to public health.

In addition, EPA is proposing to revise the State implementation regulations allowing a State, by rule, to establish alternative public notification requirements with respect to the form and content of the notice. Finally, EPA is proposing to consolidate in a single subpart of the Code of Federal Regulations (CFR) all the public notification requirements for public water systems.

DATES: Written comments on this proposed rule must be received by EPA on or before July 12, 1999. EPA will hold two public meetings on the proposal:

1. May 26, 1999, 9:00 a.m., Madison, Wisconsin.

2. June 3, 1999, 10:00 a.m., Washington, D.C.

ADDRESSES: Please send written comments on this proposed rule to the Public Notification Rule Comment Clerk (docket #W–98–19), Water Docket (MC–4101); U.S. Environmental Protection Agency; 401 M Street, S.W., Washington, DC, 20460. Comments may be hand-delivered to the Water Docket, U.S. Environmental Protection Agency; 401 M Street, S.W., Room EB 57; Washington, D.C., 20460.

Commenters who want EPA to acknowledge receipt of their comments should enclose a self-addressed, stamped envelope. No facsimiles (faxes) will be accepted. Comments may also be submitted electronically to owdocket@epamail.epa.gov. Electronic comments must be submitted as a WP 5/6/7/8 file or an ASCII file, avoiding the use of special characters and form and encryption. Electronic comments must be identified by the docket number (W-98-19). Comments and data will also be accepted on disks in WP 5/6/7/ 8 or ASCII file format. Electronic comments on this notice may be filed online at many Federal Depository Libraries.

The public meetings will take place in the following locations: Madison, Wisconsin—Best Western Inn at the Park; 22 S. Carroll Street; Madison, Wisconsin 53703. Washington, D.C.-U.S. EPA Waterside Mall; North Conference Center Room 1; 401 M Street, S.W.; Washington, D.C. 20460. FOR FURTHER INFORMATION CONTACT: The Safe Drinking Water Hotline, toll free (800) 426-4791 for general information about the public notification regulations and to register for the public meetings and request copies of this document. For technical inquiries, contact Carl B. Reeverts at (202) 260-7273.

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Regulated Entities. Entities potentially regulated by this action are public water systems (PWS). The following table provides examples of the regulated entities under this rule. A public water system, as defined by section 1401 of SDWA, is "a system for the provision of

water for human consumption through pipes or other constructed conveyances, if such system has at least fifteen service connections or regularly serves at least twenty-five individuals." EPA defines "regularly served" as sixty or more days

per year. EPA has an inventory totaling over 170,000 public water systems nationwide.

#### TABLE OF REGULATED ENTITIES

Category	Examples of regulated entities
State/Local/Tribal governments	Publicly-owned PWSs, such as municipalities; county governments, water districts, water and sewer authorities, state governments, and other publicly-owned entities that deliver drinking water as an adjunct to their primary business (e.g., schools, State parks, roadside rest stops).
Industry	Privately-owned PWSs, such as private utilities, homeowner associations, and other privately-owned entities that deliver drinking water as an adjunct to their primary business (e.g., trailer parks, factories, retirement homes, day care centers).
Federal government	Federally-owned PWSs, such as water systems on military bases.

The 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 this table could also be regulated. To determine whether your facility is regulated by this action, you should carefully examine the applicability criteria in § 141.201 of the rule. If you have questions regarding the applicability of this section to a particular entity, consult the person listed in the FOR FURTHER INFORMATION **CONTACT** section.

Additional Information for Commenters. Please send an original and three copies of your comments and enclosures (including references) to Public Notification Rule (docket #W–98–19) Comment Clerk, Water Docket (MC 4101), U.S. EPA, 401 M Street, S.W.; Washington, D.C. 20460. Comments must be received or postmarked by midnight July 12, 1999.

To ensure that EPA can read, understand, and therefore properly respond to comments, the Agency would prefer that comments cite, where possible, the paragraph(s) or sections in the notice or supporting documents to which each comment refers. Comments should use a separate paragraph for each issue discussed. The record for this rulemaking has been established under docket number W-98-19, and includes supporting documentation as well as printed, paper versions of electronic comments. The record is available for inspection from 9 a.m. to 4 p.m., Monday through Friday, excluding legal holidays, at the Water Docket, EB 57, U.S. EPA Headquarters, 401 M Street, S.W., Washington, D.C. For access to docket materials, please call (202) 260-3027 to schedule an appointment.

Consumer Right-to-Know Provisions in the Safe Drinking Water Act. The 1996 amendments to the Safe Drinking Water Act (SDWA) contain extensive provisions for consumer involvement and right-to-know that herald a new era of public participation in drinking water protection. These provisions are founded on the principle that consumers have a right to know what is in their drinking water and where it comes from before they turn on the tap. With the information provided in these provisions, consumers will be better able to make health decisions for themselves and their families.

The public notification requirement is one of six interrelated provisions now included in the SDWA. The purpose of public notification is to alert persons served by public water systems that a drinking water standard has been violated and to provide information quickly to enable consumers to take precautions to protect their health. The public notification provision was included in the original SDWA, enacted in 1974. The existing regulations are being revised here to address revisions in the 1996 SDWA amendments.

Five other right-to-know provisions were added to the SDWA through the 1996 SDWA amendments.

· Community water systems are now required to prepare and provide to their customers annual Consumer Confidence Reports (CCR) on the quality of the water delivered by the systems. The CCR is the centerpiece of the public right-to-know provisions in the SDWA. The information contained in these reports can raise consumers' awareness of where their water comes from, show them the steps that are necessary to deliver safe drinking water to their homes, and educate them about the importance of source water protection for assuring safe drinking water. The CCR and the public notification rule are interrelated: an annual summary of violations occurring during the year is one of the elements of the CCR. EPA's regulation requiring the annual CCR was promulgated on August 19, 1998 (40 CFR part 141, Subpart O; 63 FR 44511).

All community water systems must complete the first CCR by October, 1999.

- Primacy agencies are required to prepare and release an annual report listing violations of national primary drinking water regulations (NPDWR) which occurred in the last year in the public water systems within their jurisdictions. EPA is also required to issue an annual report which summarizes and evaluates the State reports and makes recommendations concerning the resources needed to improve compliance with the SDWA. The first State violation reports were released on January 1, 1998. EPA's first report was released in July, 1998.
- Primacy States are required to make completed source water assessments available to the public. States are required under the 1996 SDWA amendments to assess the condition of every public water supply within the State, including the boundaries of the source of that water supply and contamination threats within those boundaries. The source water assessments are to be completed by the States for all public water systems by 2003.
- EPA is required to develop and make available a national contaminant occurrence database that will provide information on the occurrence of both regulated and unregulated contaminants in public water systems. This information will be made available to the public through the Internet. The initial version of the national contaminant occurrence database is scheduled for release in August, 1999.
- Primacy agencies are required to notify the public of proposed decisions to allow a variance to the federal drinking water standards involving their public water system. Public water systems serving 10,000 or fewer persons that cannot meet the requirements of EPA national primary drinking water regulations (NPDWRs), using technology identified in the NPDWR, may apply for a variance to use an alternate technology

to meet the regulation. Consumers served by that water system will be provided an opportunity to comment on

or object to the variance.

All of these public right-to-know provisions are based on the belief that accountability to the public and the understanding and support of the public will be vital to address threats to drinking water quality in the years ahead. The provisions provide unprecedented opportunities for the public to participate in decisions related to the protection of their water supplies. If the public uses the opportunities, it can ensure that the choices madeparticularly by EPA and the States, but also by water systems-respond to the public's needs and concerns within the constraints of the SDWA.

#### I. Statutory Authority

Section 114 of the Safe Drinking Water Act Amendments of 1996 (Public Law 104-182), enacted August 6, 1996, amended Section 1414(c) of the Act (42 U.S.C. 300g–3(c)). Sections 1414 (c)(1) and (c)(2) were significantly revised and require EPA to amend the existing public notification regulations. The amended rules are intended to give consumers more accurate and timely information on violations, taking into account the seriousness of any potential adverse health effects that may be involved. There is no deadline for promulgating the revised public notification rule, but EPA intends to complete this rulemaking by the end of 1999 to allow States and the regulated community to coordinate public notification implementation with implementation of the Consumer Confidence Report.

The public notification (PN) provisions were part of the original SDWA in 1974 and were subsequently modified in the 1986 SDWA amendments. The public notification regulations currently in place were promulgated in 1987 and became effective in 1989 (40 CFR 141.32). The existing rule remains in place until the

new rule is promulgated.

SDWA Section 1414(c)(1) establishes who must give public notice, under what circumstances a notice must be given, and who must receive the notice. Section 1414(c)(1)(A) requires that all public water systems give notice to all persons served of any failure to comply with any national primary drinking water regulations (NPDWR), including any required monitoring. Section 1414(c)(1)(B) further requires a public water system to provide a notice when it is operating under a variance or exemption, and when a water system fails to comply with the requirements of

a variance or exemption. Section 1414(c)(1)(C) authorizes EPA, at the Administrator's discretion, to require public water systems to provide notice of the concentration level of any unregulated contaminant monitored under EPA regulations. Except for the addition of paragraph (C) of Section 1414(c)(1), these requirements are unchanged from the previous SDWA.

Section 1414(c)(2) sets the specific requirements for the form, manner, and frequency of the notice. Section 1414(c)(2)(A) requires EPA to issue regulations, after consultation with the States, that prescribe the detailed public notification requirements. The regulations must provide for different frequencies of notices based on the persistence of the violations and the seriousness of any potential adverse health effects that may be involved. Except for now requiring EPA to consult with the States prior to promulgating the revised regulations, the general directions to EPA for issuing regulations are unchanged from the previous SDWA.

Section 1414(c)(2)(B) enables States, at their option, to establish alternate requirements with respect to the form and content of the public notice, as long as the alternative State program provides the same type and amount of information as required under the EPA regulations. This Section was added with the 1996 amendments.

Section 1414(c)(2)(C) directs EPA to issue regulations which require public water systems to distribute a notice within 24 hours to all persons served for violations with potential to have serious adverse effects on human health from short-term exposure. The public water system is also required to send the same notice to the primacy agency and to consult with the primacy agency within the same 24-hour period on any additional public notice requirements. This section is a new statutory requirement.

Section 1414(c)(2)(D) directs that EPA's regulations require public water systems to provide written notice to each person served for each violation not covered under Section 1414(c)(2)(C). The Section specifies that the notice may be: (1) in the first bill, if any, after the violation; (2) in an annual report issued no later than one year after the violation; or (3) by mail or direct delivery as soon as practicable, but no later than one year after the violation. This section significantly revises and simplifies the previous statutory requirements on the form, manner, and timing of the notice.

Section 1414(c)(2)(E) allows the Administrator the option to require the

public water system to give notice to persons served of the results of unregulated contaminant monitoring required by EPA under 1445(a). EPA will soon propose a revised unregulated contaminant monitoring regulation (UCMR) This section is new under the 1996 SDWA amendments.

This rule, when issued in final form, is intended to fulfill the rulemaking requirements outlined in amended sections 1414(c)(1) and 1414(c)(2).

#### II. GAO Report Findings and Recommendations Regarding Public Notification

In June, 1992, the General Accounting Office (GAO) issued a report entitled: "Drinking Water Consumers Often Not Well Informed of Potentially Serious Violations" (GAO/RCED-92-135). GAO found:

- Low compliance with the existing public notification requirements on the part of public water systems and limited compliance tracking and enforcement on the part of EPA and the States;
- Aspects of the requirements may be a complicating factor, especially for small systems, making it difficult to effectively communicate important information to consumers; and
- Notices tended to be too technical, provide little guidance on actions to take in response to violations, and not focus enough attention on the most serious violations.

GAO made several recommendations to improve the public notification process, including:

- Changing the regulations to focus notification on more serious violations by allowing water systems to consolidate notices for less serious violations:
- Revising the health effects language to be less technical; and
- Better oversight by EPA and the States.

EPA used the GAO findings and recommendations from this audit as one of the principal starting points in developing the proposed rule.

### III. Consultation With Public Water Systems, State and Local Governments, Environmental Groups, and Public Interest Groups

Today's proposal is based on input from a broad range of stakeholders from the public and private sectors. The Agency has actively involved the States as partners in the rule development and has held a series of stakeholder meetings throughout the country to gain input and information from other groups and individuals.

First, Section 1414 (c)(2)(A) requires that EPA consult with the States before

revising the public notification regulation. Accordingly, EPA met very early in the regulatory development process with a group of States, as part of the early involvement meetings set up by the Association of State Drinking Water Administrators (ASDWA), to develop the scope of the process and identify significant issues under the new statute. States participated throughout the development process as members of the EPA regulation workgroup. EPA provided briefings to ASDWA on request several times during the past year as the development of the rule moved forward.

Second, in addition to the active involvement and consultation with the States, EPA held a series of wellattended stakeholder meetings early in the process to solicit input on the scope of the rule, issues with the current rule and how they could be corrected, and how the statutory changes should be covered in the regulation. Over a period of four months in late summer and fall of 1997, EPA held stakeholder meetings in Indianapolis, Indiana, Washington, D.C., and Seattle, Washington. The participants at these meetings ranged from State and local government officials (including water utilities) to risk communication experts and representatives of public interest groups. During this same period, meetings were also held with the Washington Drinking Water Advisory Committee, a statewide group of managers from various public and private entities, and a group of utility and State managers from several Midwestern States. Several recurring themes surfaced during these meetings:

- Public notices are extremely important to consumers; they must reach the appropriate audiences in a timely fashion to protect public health and allow consumers to make choices.
- It appears that the public notification process has not been effective (i.e., based on the results of the 1992 GAO audit and stakeholder experiences); a new regulation has to be less complex and better targeted to the seriousness of the violation to be effective.
- Public notices and their follow-up must be tailored carefully to the specific situation to be effective: it depends on the specific violation; the type and size of the water system; the affected population; and the availability of communication outlets. Therefore, any EPA regulation must be flexible enough to accommodate local situations.
- The timing and content of the public notices should be differentiated based on the severity of the violations.

• Public notices of violations should never be the centerpiece of a public water system's consumer awareness approach. EPA should actively encourage water systems to closely coordinate the public notice requirements with the Consumer Confidence Report and other longer term education strategies.

Third, EPA has begun a new initiative outside the rulemaking process, in collaboration with the States, utilities, and public interest groups, to develop a public notification handbook. The handbook will provide public notification "templates" for public water systems to help them respond quickly to the many different violation circumstances they may encounter. This initiative, which involves a series of focus group meetings with the public and others to assess effectiveness, provides "real world" experience in advance of the final rulemaking. The Handbook is not intended as an additional set of regulatory requirements, but rather as a resource that public water systems may use at their discretion to craft effective and timely notices. The draft handbook is being issued concurrently with the proposed rule. It will be announced through the **Federal Register** and copies will be mailed to stakeholders and made available through EPA's Internet home

Finally, EPA continues to provide information to our stakeholders on the status of the rulemaking. EPA periodically provides updates to the National Drinking Water Advisory Council and informational briefings, upon request, to other stakeholder groups.

#### IV. Discussion of Proposed Rule

#### A. Purpose and Applicability

The rule being proposed today revises the minimum requirements public water systems must meet regarding the form, manner, frequency, and content of the public notification. Public water systems must give notice to all persons served for all violations of National Primary Drinking Water Regulations (NPDWR) and for other situations posing a risk to public health from the drinking water. The term NPDWR *Violations* is used in the public notification regulations to include violations of Maximum Contaminant Level (MCL), Maximum Residual Disinfectant Level (MRDL), treatment technique (TT), monitoring, and testing procedure requirements. Public notice is not required, for example, for violation of the new Consumer Confidence Report regulation. See Table 1 and Appendix A

of the proposed rule for the NPDWR violations and other situations requiring a public notice. Violations not listed in Appendix A do not require a public notice under Subpart Q.

The rule would apply to existing and new public water systems that violate a NPDWR or have other situations that pose a risk to health from the drinking water. A "public water system," as defined in 40 CFR 141.2, is "a system for the provision to the public of water for human consumption through pipes or, after August 5, 1998, other constructed conveyances, if such system has at least fifteen service connections or regularly serves at least twenty-five individuals daily at least 60 days out of the year."

A public water system is either a community water system (CWS) or noncommunity water system (NCWS). A CWS, as defined in § 141.2, means "a public water system which serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents." A NCWS means "a public water system that is not a community water system."

Non-community water systems are further broken out in the drinking water regulations into transient noncommunity water systems (TWS) and non-transient noncommunity water systems (NTNCWS). A NTNCWS is defined by EPA under § 141.2 as "a public water system that is not a community water system and that regularly serves 25 of the same people over six months of the year." An example is a school or business that has its own water well. A TWS is defined by EPA under § 141.2 as "a noncommunity water system that does not regularly serve 25 of the same persons over six months of the year." An example is a roadside rest stop with its own water well.

For illustration purposes, Table A provides a summary of the number of public water systems, broken out by type of system, the number of these systems with violations during FY 1996, and the total number of violations during the same period. Table A shows that 46,572 of the 172,248 public water systems had one or more violations in FY 1996. Overall, the 46,572 public water systems with violations committed 243,604 violations in FY 1996. The overwhelming majority of these violations were failure to monitor according to the regulations. Although not all violations require a separate public notice, each violation requires the public water system to comply with the public notification requirements.

TABLE A.—Number of Water Systems Regulated Under Public Notification Rule in FY 1996

Type of water system	Number of systems	Systems with viola- tions	Violations
Community Water Systems (CWS)		14,620 6,227 25,725	126,853 51,796 57,565
Public Water Systems (PWS)	172,248	46,572	236,214

Source: PWS Inventory and Compliance Statistics: FY 1992-FY 1996.

As shown in Table A, 55,427 of the regulated public water systems are CWSs. CWSs must comply with all the NPDWRs in effect, currently covering 80 separate contaminants. CWSs serve residential populations and range from large municipal systems that serve millions of persons to small systems, which serve fewer than 100 persons. CWSs can be further categorized as publicly-owned systems, privatelyowned systems, and systems which provide water as an ancillary function of their principal purpose. In FY 1996, 14,620 CWSs committed 126,853 violations. Approximately 80 percent of community water systems serve fewer than 3,300 people.

Of the regulated public water systems, 20,237 are NTNCWS. Virtually all NTNCWSs provide water as an ancillary function of their principal purpose (for example, schools, day-care facilities, factories). NTNCWSs must comply with the same national primary drinking water regulations as community water systems. During FY 1996, 6,227 NTNCWSs committed 51,796 violations. Approximately 99 percent of NTNCWSs serve fewer than 3,300 people.

The balance of the regulated public water systems (96,584) are TWS. Virtually all TWSs provide water as an ancillary function of their principal purpose (for example, highway rest stops, gas stations, state parks). TWSs must comply only with existing national primary drinking water regulations where short-term violations may pose a health threat—total coliform, nitrate, nitrite, combined nitrate+nitrite, and the surface water treatment rule. In FY 1996, 25,725 TWSs committed 57,565 violations. Over 99 percent of TWSs serve fewer than 3,300 people.

### B. Effective Dates and Rationale

EPA is proposing that the revised public notification rule become effective no later than two years after the final rule is published in the **Federal Register** 

or on the date the primacy agency's revised regulation becomes effective, whichever comes first. Setting the twoyear effective date matches the time period allowed for States under the primacy regulations (40 CFR Part 142, Subpart B) to adopt new or revised National Primary Drinking Water Regulations (NPDWRs). As the public notification rule is not an NPDWR, EPA has discretion to set an effective date for the revised rule. EPA believes it is appropriate to set the effective date consistent with the basic two-year time period allowed States to adopt the revised regulation. This coordinated phase-in of the new public notification requirements in each State will be more efficient and will avoid the potential confusion of having different State and EPA requirements in effect at the same time.

EPA is proposing to make the rule effective in a State as soon as the State's revised regulation is effective under its primacy program. In practical terms, this will mean that the new requirements will go into effect at different times nation-wide based on the speed of the State adoption of the new requirements. Where EPA directly implements the program (such as in Wyoming and Washington, D.C., and on Indian lands), the revised rule will go into effect 90 days after EPA publication of the final rule. Regardless of the primacy situation, the rule would go into effect after two years for all water systems, even in those States that request and are granted an extension to adopt the revised regulation beyond the basic two-year time period.

The revised public notification rule will apply to new and existing violations of NPDWRs, variances or exemptions granted by a primacy agency, and violations of conditions of an existing variance or exemption after the effective date of this rule. However, EPA does not intend to require that public water systems provide initial

public notices under the new rule for violations and situations where the initial public notice has already been given under the regulations in place at the time. Unless the primacy agency makes a different determination on a case-by-case basis, the revised rule will apply to repeat notices for existing violations or any public notice requirements applying subsequent to the public notices given under the old rule.

EPA considered a number of options on the effective date of the rule before settling on the two-year time frame. EPA believes that the new regulation, consistent with the revised statute, will make the public notification process simpler, more efficient, and better targeted than the current regulation. In this respect, the sooner the new rule goes into effect, the more effective the public notification process will be. However, because the proposed rule replaces a State program already in operation, applying the new rule to public water systems well in advance of the change in the State program would be confusing to the regulated community and the public. It could result in two sets of public notice requirements (i.e., the current State rule and the new EPA rule) being in effect for the public water systems during this transition period. Because the intent is still to replace the current regulation with the new streamlined rule as soon as possible, comments are requested on the proposed effective date. Suggestions on other options to put the new regulations into effect sooner are welcome.

### C. Summary of Changes to Current Public Notification Requirements

The proposed rule is substantially different from the public notification regulation currently in effect. Table B is a summary of the major differences between the current regulation and the proposed rule.

TABLE B.—SUMMARY	OF DIFFERENCES	BETWEEN PROPOSED	RUIF AND	EXISTING RULE
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Statutory authority (SDWA, as amended in 1996)	Current rule (§ 141.32)	Proposed rule (part 141, subpart Q)
1414(c)(1) Each owner or operator of a PWS shall give notice of NPDWR violations, levels of unregulated contaminants, and existence of a variance or exemption.	(§141.32(a) and (b)) Owner or operators of PWSs must notify for the following violations/situations:  Maximum contaminant levels (MCL)  Treatment technique  Testing procedure  Monitoring  Operation under a variance or exemption  Noncompliance with variance or exemption schedule	(§§ 141.201(a) and 141.202(a)) Includes violations from current rule and adds broader definition of waterborne disease outbreak, adds new IESWTR and DBP standards, moves fluoride SMCL and unregulated contaminant monitoring public notices from other parts of the regulations. Adds a new Appendix A to the rule listing all violations and situations where public notification is required.
1414(c)(2)(A) Manner, frequency, and form are prescribed based on seriousness and frequency of violations.	(§§ 141.32 (a)(1)(iii) and 141.32(a) and (b)) There is a three-tier system, although tiers are not named. Public notices are divided into three tiers: violations of MCLs that may pose an acute risk to human health; MCLs, treatment technique, and variance or exemption schedule violations; and other violations (including monitoring) and operation under a variance or exemption.	(§141.201(b)) Tiers are defined based on seriousness of the violation or situation and of potential health effects, and all violations or situations are assigned to a tier (Appendix A)  Tier 1 notice for violations or situations with significant potential to have serious adverse effects on human health as a result of short-term exposure;  Tier 2 notice for all other violations or situations with potential to have serious adverse effects on human health; and  Tier 3 notice for all other violations and situations not included in Tier 1 and Tier 2.
1414(c)(2)(C)(iii)  Notice must be provided to Administrator or primacy agency	(§ 141.31(d)) System must provide a copy of the notice to the State within 10 days.	(§ 141.31(d)) Revised to require PWS to submit a certification and a copy of the notice to the primacy agency within 10 days. (§§ 141.202(b) and 141.201(c)) New section added to require consultation with primacy agency within 24 hours for violations or situations requiring a Tier 1 notice.
1414(c)(2)(C)(1) For violations with potential to have serious adverse effects on human health as a result of short-term exposure, notice must be distributed as soon as practicable but no later than 24 hours after the occurrence of the violation	(§141.32(a)(1)(iii)(A)–(D) Acute violations include (1) Any violations specified by State (2) Nitrate/nitrite MCLs (3) Fecal coliform/ E. coli (4) Waterborne disease outbreak in unfiltered systems subject to Surface Water Treatment Rule	(§141.202) Tier 1 notice— Violations and situations include those defined as acute in the current rule, plus: an expanded definition of waterborne disease outbreak to include all water systems; chlorine dioxide MRDL violation under new DBP rule where samples taken in the distribution system exceed the standard or where samples are not taken in the distribution system; and violation of the testing procedures to determine if fecal coliform is present after the presence of total coliform in the distribution system is confirmed.
	Provide copy of notice to radio and TV stations within 72 hours, or by posting or hand delivery within 72 hours. Posting must continue as long as the violation exists.	Timing revised to require notice within 24 hours; must be by electronic media, posting, or hand delivery, plus any additional methods necessary to reach all persons served.
	Additional notices: by newspaper within 14 days or posting or hand delivery if no newspaper is available; by mail within 45 days (may be waived if state determines violation has been corrected); and repeat notice every three months thereafter.	Revised to not require additional notices for same violation, deferring instead to the primacy agency to set additional requirements (including additional notices) on a case-by-case basis.
1414(c)(2)(D)(1) Regulations shall specify notification procedures for violations other than Tier 1; notice shall be in written form	(§ 141.32)(a)) For MCL, treatment technique, and variance or exemption schedule violations.	(§141.203) Tier 2 notice includes those described in §141.32(a) of the current rule, plus the new standards under the IESWTR and DBP rules, and serious and persistent monitoring and testing procedure violations, as determined by the primacy agency.

TABLE B — SUMMARY OF	DIFFERENCES BETWEEN	PROPOSED RULE AND	EXISTING RULE—Continued

Statutory authority (SDWA, as amended in 1996)	Current rule (§ 141.32)	Proposed rule (part 141, subpart Q)
	By newspaper within 14 days or by posting or hand delivery if no newspaper is available.	Revised to require notice within 30 days unless the primacy agency allows an extension of up to three months for specific circumstances. Unless primacy agency directs otherwise, CWS must use mail or direct delivery, and other methods reasonably calculated to reach persons served. NCWS must use posting, direct delivery, or mail, and other methods reasonably calculated to reach persons served.
	Additional notices: by mail within 45 days (may be waived if state determines violation has been corrected), and repeat notice every three months thereafter by mail or hand delivery.	The initial notice does not require multiple methods of delivery unless it is needed to reach persons served. Repeat notice required every three months where violation persists, unless the primacy agency determines less frequent repeat notice (no less frequent than annually) is warranted because of specific circumstances. Method of delivery for repeat notice is not specified.
	(§ 141.32(b) For monitoring and testing procedure violations, and operation under variance or exemption.	(§141.204) The violations and situations requiring a <i>Tier 3 notice</i> are the same as those described in §141.32(b) of current rule, with the addition of a notice requirement for "other violations" determined by the primacy agency to require a Tier 3 notice.
	By newspaper within three months of the violation or the granting of variance or exemption, or by hand delivery or posting if no newspaper is available. State may allow less frequent public notice (up to 1 year) for minor monitoring violations.  Repeat notice every three months thereafter	Revised to require notice within one year. Unless primacy agency directs otherwise, CWS must use mail or direct delivery, and other methods reasonably calculated to reach persons served. NCWS must use posting, direct delivery, or mail, and other methods reasonably calculated to reach persons served. CCR or other annual reports may be used, as long as notice in CCR meets PN requirements.  Repeat notice annually; no method specified.
Notice to new billing units (not in statute)	by mail or hand delivery.  (§ 141.32(c)) Community water system must give a copy of the most recent public notice for any outstanding violation of any MCL, any treatment technique requirement, or	(§ 141.206) Revised to require notice for any outstanding violation, including monitoring and testing procedure violations.  Revised to require non-community systems to
1414(c)(2)(C)(ii) and 1414(c)(2)(D)(ii) Content of notices	any V&E schedule.  (§ 141.32(d)) Each notice must provide a clear explanation of the violation, potential health effects, population at risk, steps being taken to correct violation, telephone number of the owner, operator, or designee of the public water system, necessity for seeking alternative water supplies, if any, and any preventive measures consumers should take until the violation is corrected.	keep notice posted for as long as violation exists, even if notice was initially hand-delivered or otherwise distributed.  (§ 141.205) Adds "when violation was found" and "when system expects to return to compliance" to content elements. New requirement to include "contaminant level". Adds new element requiring standard language asking bill paying customers to provide copies of notice to other persons served who may not have received the notice directly from the PWS.  Also, adds minimum content elements for notices of operation under variance or exemption, which parallels CCR requirements. No longer requires health effects language for operation under a variance or exemption.
	(141.32(e)) Systems must include standard health effects language for MCL, treatment technique, variance or exemption schedule violations, and operation under a variance or exemption.	(New Appendix B) Revises standard health effects language.  Adds standard language for monitoring and testing procedure violations.
Special notice for exceedance of Fluoride Sec- ondary Maximum Contaminant Level (SMCL) (not in statute)	(§ 141.32(f)) Notice of SMCL exceedances required within 12 mos.; shall contain language in § 143.5(b).	(§141.208) Moved to new Subpart Q, mandatory language is simplified

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Table B.—Summary of Differences Between Proposed Rule and Existing Rule-	—C.Ontiniieo

Statutory authority (SDWA, as amended in 1996)	Current rule (§ 141.32)	Proposed rule (part 141, subpart Q)
Public notice by primacy agency (not in statute)	(§ 141.32(g)) The State may give notice to the public on behalf the public water system if the State complies with the requirements of § 141.32. However, the owner or operator of the public water system remains legally responsible.	(§ 141.209) No change.
1414(c)(2)(E) Administrator may require notice of levels of unregulated contaminants monitored under section 1445(a)	(§141.35(d)) Written notice of availability of results within three months after system receives results (surface water systems only need to notify after the first quarter of monitoring).	(§ 141.207) Revised to require notice of availability of results within 12 months, following Tier 3 delivery requirements; deletes § 141.35(d).
1414(c)(2)(B) States may establish alternative notification requirements	(§ 142.10(a)) Authority to require public water systems to give public notice that is no less stringent than the EPA requirements in §§ 141.32 and 142.16(a).	(§ 142.10(a)) No change.
	(§ 142.16(a)) If the state chooses to decrease notice frequency for minor monitoring violations it must submit to EPA the criteria used to decide the decreased frequency and which violations are minor, and it must submit the new notice requirements.	(§ 142.16(a)) Deletes current requirement. Reaffirms under § 142.16(a)(1) the two year deadline (with possible 2-year extension) for State primacy program revision.  New 142.16(a)(2) added to require State to include in primacy program enforceable requirements and procedures when State opts to use its discretion to deviate from EPA rule.  New 142.16(a)(3) added to allow primacy agencies to establish alternative public noti-
		fication requirements with respect to form and content of notice, consistent with 1414(c)(2) (B) of 1996 SDWA amendments.

#### D. Rationale for Format of Proposed Rule

EPA is proposing a new "plain language" format for the revised public notification regulation, consistent with the requirements outlined in the June 1, 1998 memorandum sent by President Clinton to all Federal agencies and the ongoing Agency initiative to take steps to improve both the clarity and comprehension of regulatory language. The difficulty in understanding federal regulations has been a longstanding criticism of federal agencies, including EPA. The current public notification rule, in particular, has been criticized by GAO and others as being too complex and confusing to implement. This criticism was viewed by GAO in its 1992 report as one of the reasons the public notification process is ineffective.

The proposed rule is structured in a question and answer format. Where possible, tables were inserted in the rule to make the various requirements easier to understand. In addition, EPA is proposing that an appendix be added to list the acronyms used in the public notification regulation. (See Appendix C to 40 CFR Part 141, Subpart Q.)

EPA welcomes comments on the new format and is soliciting ideas on ways to make the public notification regulation more readable by the regulated community:

- Have we organized the material to suit your needs?
- Are the requirements in the rule clearly stated?
- Does the rule contain technical language or jargon that isn't clear?
- Would a different format (grouping and ordering of sections, use of headings, paraphrasing) make the rule easier to understand?
- Would more (or shorter) sections be better?
- Could we improve clarity by adding tables, lists, or diagrams?
- What else could we do to make the rule easier to understand?

### E. General Provisions of Proposed Rule (§ 141.201)

Today's proposal would replace the existing public notification regulation with an entirely new subpart (40 CFR Part 141, Subpart Q), which incorporates the new provisions under sections 1414(c)(1) and (c)(2) of the SDWA, as amended in 1996, and would streamline the requirements to more effectively meet the objectives of the public notification process. Informing consumers of violations has been a key feature of the SDWA since the statute was first enacted in 1974.

The primary purpose of public notification is to inform consumers of

any potential adverse health effects related to the drinking water provided to them and of the steps they can take to minimize the impact. Public notification also addresses the fundamental issue of consumer-right-toknow, providing information on a timely basis that allows consumers to make informed choices about use of their drinking water. The statute requires EPA to issue regulations prescribing the manner, frequency, form, and content for giving public notice. The proposed rule would revise the existing public notification requirements:

- To focus the public notification on the violations posing the greatest potential risk to public health,
- To give greater latitude to States to develop alternative programs to meet their unique needs;
- To provide greater flexibility to public water systems to tailor distribution of the notice to best reach the affected population; and
- To encourage water systems to use the annual Consumer Confidence Report or other annual reporting mechanism to give the initial public notice for less serious violations.

These changes to the regulation are intended to better meet the purposes of the public notification process to better inform consumers about drinking water issues affecting their health.

1. Who must give public notice? EPA is proposing to amend the current regulatory language to explicitly require public notice for "other situations determined by the primacy agency to have potential of serious adverse effects on human health." (See Table 1 of 40 CFR 141.201 of the proposed rule.) Other than this addition, EPA is proposing to maintain the current regulatory requirements defining who must give public notice and in what situations it must be given. Public water systems are required under the proposed rule, as now, to give public notice to persons served by the system for any failure to comply with a National Primary Drinking Water Regulation (NPDWR), including any monitoring and testing procedure requirements, and where the water system is operating under a variance or exemption to the NPDWR. The proposal will include the public notification provisions for the new Disinfection Byproduct (DBP) and Interim Enhanced Surface Water Treatment Rule (IESWTR) regulations which were published on December 16, 1998 (63 FR 69389 and

The proposed new language to this section enables the primacy agency to require public notice for other situations not explicitly listed under Sections 1414(c)(1) and (c)(2) of the SDWA. EPA recognizes that Sections 1414(c)(1) and (c)(2) limits public notification requirements to violations of NPDWRs or required monitoring, variances and exemptions, and unregulated contaminant monitoring results. Thus, the situations identified for public notice in Sections 1414(c)(1) and (2) are limited to violations or notification concerning existing drinking water regulations. However, in some cases, such as in the Milwaukee cryptosporidium outbreak, dangerous situations may occur without a violation of existing drinking water requirements. In these cases as well, public notification may be critical to informing the public of the need to take immediate steps to avoid health risks. EPA is proposing to add such situations to the list of required public notices in this rule. The Agency believes that Section 1445(a) of the SDWA provides ample additional authority for requiring public notification of situations other than those listed in Section 1414(c)(1) and (c)(2) that are deemed by EPA in its regulations or by the primacy agency on a case-by-case basis to present a potential danger to drinking water consumers.

To improve the clarity and understanding of when a public notice is required, the proposed rule also consolidates into a new subpart (Part 141, Subpart Q) other special public notice requirements (i.e., exceedance of the fluoride secondary MCL; the notice of the availability of the results of unregulated contaminant monitoring data). A list of all violations and situations requiring a public notice, including the specific regulatory citation, is presented in a detailed Appendix A attached to the rule. Appendix A is intended to be updated as new NPDWRs are promulgated or when other situations arise where a public notice is required. A public notice is only required for the violations or other situations listed in Appendix A (unless the primacy agency requires notice for other situations.)

EPA is asking for comment on the proposed addition of explicit regulatory language enabling the primacy agency (including EPA in its regulations) to require public notification for other situations it believes have the potential for serious health risk. EPA is also asking for comment on its proposal to present in tabular form all the situations requiring a public notice and its plans to update Appendix A as new rules are promulgated.

2. What type of public notice is required for each situation? EPA is proposing to divide the public notice requirements into three tiers:

• Tier 1 Public Notice, for violations and situations with significant potential to have serious adverse effects on human health as a result of short-term exposure:

- Tier 2 Public Notice, for other violations and situations with potential to have serious adverse effects on human health; and
- *Tier 3 Public Notice*, for all other violations and situations requiring a public notice not included in Tier 1 and Tier 2.

The form, manner, and frequency of the public notice is determined by the tier the violation or situation is assigned. Appendix A assigns each violation and situation to one of the three tiers. The specific requirements for the public notice in each tier are defined under §§ 141.202, 141.203, and 141.204 of this proposed rule.

The proposed three-tier approach to public notification will be consistent with the intent of the new public notification provisions in the 1996 SDWA amendments. Section 1414(c)(2)(A) directs the Administrator to issue regulations that provide for different frequencies of notice based on the differences between intermittent and

persistent violations and the seriousness of any potential adverse health effects. Section 1414(c)(2)(C) sets very specific requirements for violations with potential to have serious adverse effects on human health from short-term exposure. This includes a new requirement that such notices be distributed to all persons served no later than 24 hours after the occurrence of the violation. Section 1414(c)(2)(D) requires EPA to define in its regulations the notification procedures for all violations not included under subparagraph (C). This section requires that such procedures specify that the water system provide written notice to each person served in either: (1) the first bill prepared, if any, after the violation; (2) in an annual report issued no later than one year after the violation; or (3) by mail or direct delivery as soon as practicable, but no later than one year after the violation.

EPA was guided by several objectives in developing and evaluating options to meet the provisions under Sections 1414(c)(1) and (c)(2) of the 1996 SDWA amendments. The proposed regulation reflects these baseline objectives:

- First, to be effective in meeting the statutory mandate under 1414(c)(2)(C) to get the notice out no later than 24 hours for the most serious violations affecting health from short-term exposure, the public notice regulations had to focus sharply on a very limited set of violations. EPA believes that requiring the 24-hour notice for too many violations would be confusing, complex, and more difficult to implement. It might also dilute the effectiveness of the 24-hour notices if customers receive too many of them. Therefore, EPA decided in its proposal to limit the requirements for 24-hour notices to those violations with very strong evidence of serious short-term health risks. Other violations and situations that may require a 24 hour notice on a case-by-case basis would be handled by the primacy agency. EPA recognizes that there are other violations with possible shortterm health effects which have not been included in Tier 1. But EPA believes these violations do not routinely require the same urgency as those violations where the evidence of serious shortterm risk to health is strong. Examples of such violations include Total Coliform Rule (TCR) violations where no fecal coliform is present and surface water treatment rule treatment technique violations.
- Second, to address the notice requirements for all the other violations, the public notice regulation has to take into account the differences in risk between the different types of

violations. A sharp separation is clear between the violations that may pose a direct risk due to exposure to harmful contaminants (either from short-term or chronic exposure) and the vast majority of violations which pose no known health risk in themselves. Examples that may pose a direct health risk are:

- —Violations of the maximum contaminant levels (MCLs) and maximum residual disinfectant levels (MRDLs), because the contaminant was actually found in the drinking water at harmful levels; and
- —Violations of treatment technique (TT) requirements, because such a violation indicates a deficiency in water system treatment or operations that increases the likelihood that contaminants may be in the drinking water.

Violations that are not directly related to health risks include the majority of the monitoring and testing procedure violations, which are onetime violations resolved during the next monitoring period. The purposes of the public notice for the two groups are different. Notices for MCL, MRDL, and TT violations are necessary to inform consumers where the probability of direct exposure to harmful contaminants is elevated, to give them an opportunity to take action to avoid continued exposure. Timing of the notice is important. Notices for monitoring violations in most cases are necessary to meet a consumer right-toknow objective, separate from the known or potential health risks from the drinking water. An annual summary for these violations is adequate.

• Third, to be effective, the public notice regulation has to be easy to understand, be simple to implement in practice, and must provide States and water systems enough flexibility to tailor their public notices to the specific local situation. EPA is well aware that the complexity of the current public notification regulations is a contributing factor in the inability of public water systems to meet the legislative objectives.

EPA considered a number of options for meeting these objectives. Other than the proposed three-tier option, the option most seriously considered was to define a two-tier public notice structure, separating violations with potential short-term health effects from all other violations. The first tier would incorporate the provisions under 1414(c)(2)(C). The regulations for the second tier would either prescribe the form, manner, and frequency of the notice or simply incorporate the statutory language under 1414(c)(2)(D).

This option would allow the primacy agencies to define additional notice requirements to separate the violations posing potential health risks from other administrative and technical violations. Where primacy agencies had no alternative program, the discretion on the notice requirements for these other violations would be left to the individual water systems. The advantages of such a two-tier public notice structure are that it would make the federal requirement simple for water systems to understand, would leave greater flexibility to the States to tailor the public notice requirements to their specific needs, and would probably result in fewer separate notices for violations in the lower tier. This might lead customers to take notices for violations in the upper tier more seriously.

However, EPA is not proposing this two-tier structure. EPA and most of the stakeholders EPA consulted believe there are compelling reasons for the EPA regulation to differentiate among the lower tier violations based on the seriousness and urgency of the risk. These violations span a wide range of potential health risks. A "middle-tier" public notice requirement between the 24-hour notice and the annual notice is appropriate for those lower-tier violations and situations that may have the potential for serious adverse effects on human health, but are not significant or urgent enough to require an emergency notice. EPA believes a threetier system of public notification would:

- Effectively separates the form, manner, content, and frequency of public notice based on the seriousness of any potential adverse health effects (as mandated under 1414(c)(2)(A));
- Meets the clear objectives and purposes of public notification;
- Be simple and straightforward to implement; and
- Meets the requirements of the statute.

EPA requests comment on whether the two- or three-tiered structure would be more appropriate for the final EPA regulation and what the advantages and disadvantages of the preferred tier structure would be.

3. Who must be notified? The SDWA requires that public notice be provided to "the persons served by the system." (SDWA, Section 1414(c)(1)). Reaching the persons served may pose a challenge to some water systems. Some consumers (such as apartment dwellers, other renters, and condominium residents) may not be the persons paying the water bill. Thus, the form and manner of the public notice necessary to reach the persons served is unique to the local

situation. The proposed rule will require water systems to provide the notice in a form and manner that is reasonably calculated to get the information to all persons served in the required time period. The minimum methods to satisfy this requirement are specified in the proposal for each public notification tier. The proposed rule would also retain the requirement that copies of the public notice be sent to the primacy agency within 10 days, in accordance with the requirements proposed in 40 CFR 141.31(d).

F. Form, Manner, and Frequency of the Tier 1 Public Notice: Violations With Significant Potential To Have Serious Adverse Effects on Human Health as a Result of Short-Term Exposure (§ 141.202)

Today's rule proposes to define the form, manner, and frequency of a Tier 1 public notice and to require that public water systems use a Tier 1 public notice.

#### 1. Tier 1 Violations and Situations

The proposed rule would require a Tier 1 public notice for the following violation categories and other situations:

- Violation of the MCL for total coliform, when fecal coliform or *E. coli* are present in the water distribution system; or failure to test for fecal coliforms or *E. coli* after the presence of coliform bacteria is confirmed in the water distribution system;
- Violation of the MCL for nitrate, nitrite, or combined nitrate+nitrite:
- Violation of the MRDL for chlorine dioxide, where one or more required repeat samples taken in the distribution system the following day exceed the MRDL, or when repeat samples are not taken in the distribution system;
- Occurrence of a waterborne disease outbreak, as defined in § 141.2; and
- Other violations or situations with significant potential to cause serious adverse health effects from short-term exposure, as determined by the primacy agency.

The violations and situations listed here as requiring a Tier 1 public notice all have significant potential to cause serious adverse health effects from short-term exposure to the drinking water. The list of violations requiring a Tier 1 public notice include all those defined as posing acute health effects in the current rule. In addition, three new violations and situations are being proposed today for Tier 1 public notice:

 First, a Tier 1 notice would be required for violations of the new chlorine dioxide standard when the violation is based on monitoring results in the distribution system. This was

added to the list of violations requiring a Tier 1 notice to be consistent with the public notification requirements included with the disinfection byproducts regulation published on December 16, 1998 (63 FR 69389). Violations of the chlorine dioxide standard within the distribution system may harm human health based on shortterm exposure. Systems that do not monitor for chlorine dioxide in the distribution system after exceeding the MRDL in entry point monitoring also must issue a Tier 1 notice, to remain in effect until they are able to demonstrate that chlorine dioxide is not present at these harmful levels in the distribution system.

• Second, the Tier 1 coverage for waterborne disease outbreaks would expand the definition in the current rule beyond violations of the SWTR for unfiltered systems. The proposed rule broadens this definition to include waterborne disease outbreaks from all public water systems that meet the definition in § 141.2:

Waterborne disease outbreak means the significant occurrence of acute infectious illness, epidemiologically associated with the ingestion of water from a public water system which is deficient in treatment, as determined by the appropriate local or State agency.

Expanding the coverage to require a Tier 1 notice from any public water system linked to a waterborne disease outbreak meets the public health objectives of the public notification provision. The Agency believes that Section 1445(a) of the SDWA provides ample additional authority for requiring public notification in such situations, even where the situation is not explicitly listed as requiring public notification in Section 1414(c)(1) and (2) of the SDWA. [See discussion of this in Section IV.E.1 above.] This expansion of the Tier 1 public notification requirements was recommended and broadly supported by the stakeholders consulted during the development of the proposed rule.

 Finally, failure to test for fecal coliform once the presence of total coliform in the water distribution system is confirmed would trigger a Tier 1 public notice, to remain in effect until the system was able to demonstrate that fecal coliform or E. coli bacteria is no longer present. The current rule does not specifically address the public notice requirements when a PWS fails to test for fecal coliform after confirming the presence of total coliforms. EPA believes strongly that such violations pose great potential for short-term adverse health risks to consumers, because a system's failure to test for fecal coliforms in such situations may

disguise a very serious drinking water quality situation. Requiring a Tier 1 public notice in such situations was widely supported by stakeholders consulted during this rulemaking.

EPA considered several options that would add or subtract from the list of violations requiring this emergency public notice. A number of violations that may have the potential to pose health risks from short-term exposure are not included in the proposed list. Specifically, violations of the Total Coliform Rule (TCR) MCL (without the presence of fecal coliform) and the Surface Water Treatment Rule (SWTR) treatment techniques are not listed in Tier 1, although they may be associated with potential health risks from shortterm exposure. The vast majority of the MCL and TT violations in FY 1996 were violations of the TCR and SWTR. EPA does not believe these violations routinely require the same urgency as those violations included in Tier 1, where the potential for serious shortterm risk to health is significant whenever it occurs.

EPA is proposing to limit the violations routinely requiring a Tier 1 notice to those with a significant potential for serious adverse health effects from short-term exposure. Other violations which may have a potential for adverse health risk from short-term exposure, but where such risk is not routinely significant, would be included in the Tier 2 list. EPA believes focusing the proposed 24-hour notice requirement on the more limited set of violations will increase the effectiveness of the Tier 1 notices and lead to greater health protection. EPA recognizes that in certain situations a TCR or SWTR violation may create a significant and immediate health risk. In those situations, a 24-hour notice is necessary to immediately alert consumers to the potential risk. Because such situations are best determined on a case-by-case basis, EPA is proposing to enable primacy agencies to determine when special circumstances require 24-hour notices for situations not listed in § 141.202 of the rule.

2. Timing of the Tier 1 Public Notice (and Consultation Requirement)

The proposed rule will require that a Tier 1 public notice be provided by the public water system as soon as practicable but no later than 24 hours after the system learns of the violation. Under the proposal, the public water system would also be required to initiate consultation with the primacy agency within that same 24-hour period and comply with whatever subsequent

public notification requirements are established during that consultation.

The requirement that the public water system consult with the primacy agency within the first 24 hours of discovering the violation is new in the proposed rule. The 1996 SDWA amendments, under 1414(c)(2)(C)(iii), require that a copy of the initial Tier 1 notice also be sent to the primacy agency within the same 24 hour period after the occurrence of the violation. Under 1414(c)(2)(C)(iv), the statute requires that a public water system facing a Tier 1 notice situation distribute a notice when required by the primacy agency after consultation. EPA is interpreting the statutory requirements under clause C(iii) and clause C(iv) to require that the public water system consult with the primacy agency within the first 24 hours after the violation becomes known to the water system to determine subsequent public notice requirements. EPA further interprets the statute to require the initial public notice required within the first 24 hours under 1414(c)(2)(I) to apply regardless of when the consultation with the primacy agency takes place. In contrast, the current rule sets the subsequent public notice requirements (e.g., repeat notice frequencies, form and manner of subsequent notice, etc.) in the rule itself, rather than as a result of consultation on a case-by-case basis.

The proposed rule would identify a number of elements which may be covered during the consultation, including the timing, form, manner, frequency, and content of subsequent notices and other actions reasonably calculated to ensure the notice is provided to all persons served. Additional notices may be necessary to reach other persons served who may not have seen the initial notice and to reaffirm the seriousness of the public health risk from drinking the water. EPA also believes that a supplemental notice to announce that the violation has been resolved and the risk from the drinking water has been abated is an effective way to bring closure to the emergency situation. When to require subsequent notices can best be handled by the primacy agency on a case-by-case basis in consultation with the public water system.

In summary, the timing and process established for the Tier 1 public notice in the proposed rule would be significantly different from the current rule. First, the public water system would be required to distribute the notice within 24 hours (as required under 1414(c)(2)(C)), rather than 72 hours. This is a statutory obligation for such violations under the 1996 SDWA

amendments. Second, the proposed rule would set a new requirement that the water system consult with the primacy agency to determine subsequent public notification requirements. As described earlier, EPA interprets the statute as requiring this consultation with the primacy agency.

3. Form and Manner of the Delivery of the Tier 1 Notice

The proposed rule would allow water systems some flexibility in choosing the form and manner used to distribute the notice, but it reaffirms the enforceable requirement that the form and manner of notice delivery selected by the public water system be reasonably calculated to reach all persons served within the 24 hour period. To satisfy this requirement, the proposed rule would require water systems to use, as a minimum. appropriate broadcast media, posting of the notice in conspicuous locations, and/or hand delivery to residences or businesses served by the system. In contrast, the current rule requires that the initial notice be by electronic media and subsequent notices be first in the newspaper and later on by mail. The changes in the public notification process for these emergency-type situations are expected to ensure faster public communication that is better tailored to the specific situation.

EPA is requesting comment on the Tier 1 public notification requirements, in particular the list of violations requiring such a notice, the new consultation process now proposed in lieu of more prescriptive EPA requirements, EPA's interpretation of the statute under 1414(c)(2)(C) which allows EPA to require public water systems to consult with the primacy agency, and the revised requirements for the form and manner of the Tier 1 notices.

G. Form, Manner, and Frequency of the Tier 2 Public Notice: Other Violations With Potential to Have Serious Adverse Effects on Human Health (§ 141.203)

Today's rule proposes to define the form, manner, and frequency of a Tier 2 public notice.

1. Tier 2 Violations and Situations

The proposed rule would require a Tier 2 public notice for the following violation categories and other situations:

- All violations of the MCL, MRDL, and treatment technique requirements not included in the Tier 1 notice category;
- Violations of the monitoring and testing procedure requirements where the primacy agency determines that a Tier 2 public notice is required; and

• Failure to comply with the terms and conditions of any existing variance or exemption in place.

The above list is similar to the list in the comparable section of the current rule, with two exceptions. First, the proposed rule would set the new public notice requirements for the recently published Disinfection Byproducts Rule and the Interim Enhanced Surface Water Treatment Rule (63 FR 69389 and 69477). Second, the proposed rule would allow the primacy agency, at its option, to require a Tier 2 public notice for a specific monitoring or testing procedure violation. Unless the primacy agency determines otherwise, monitoring and testing procedure violations would be reported in the annual Tier 3 notice.

EPA considered two other options that would add or subtract from the list of violations requiring a Tier 2 notice:

- The first option was to move some of the MCL or treatment technique violations into Tier 3 rather than Tier 2, with the leading candidates for Tier 3 notice being MCL violations posing chronic health risk and the Lead and Copper Rule (LCR) treatment technique violations. EPA also considered separating the LCR treatment technique violations further, putting some of the lesser violations unlikely to pose a direct risk to public health (e.g., public education) into Tier 3. However, this could make the requirements too complex and too difficult to communicate simply. Simplicity in understanding and implementing the requirements was one of the main recommendations of the GAO report. EPA is further concerned that delaying the initial notice for MCL violations, even if levels barely exceed the standard, beyond 30 days (or three months at the primacy agency's discretion) may not be consistent with the Agency's consumer right-to-know objective.
- The second option was to move the notice for the monitoring violations from Tier 3 to Tier 2, recognizing that persistent monitoring violations could disguise potentially serious drinking water quality violations. EPA did not select this option. Instead, the proposal enables the primacy agency to require on a case-by-case basis that serious monitoring and testing procedure follow the Tier 2 public notice requirements where necessary. EPA developed an alternative approach to the proposal that is discussed in Section VI(A) of the Preamble. Comments are requested on both the proposal and the option discussed in Section VI(A).

2. Timing of the Tier 2 Public Notice

The proposed rule, under § 141.203(b), would require the public water system to provide a Tier 2 public notice to persons served as soon as practicable, but no later than 30 days after the system learns of the violation. The public water system would be obligated to get the notice out as soon as practicable, particularly where the situation requires an earlier notice. The proposal also would require the public water system to repeat the notice every three months for as long as the violation exists. Under the proposal, the primacy agency may opt to define specific violation circumstances that warrant an extension of the initial Tier 2 notice or a different repeat notice frequency for continuing violations. The proposal allows the primacy agency to define specific circumstances where the initial notice may be extended beyond 30 days (up to three months) and where the repeat notice may be set less frequently than every three months (but no less frequently than once a year).

In contrast, the current rule requires a newspaper notice within 14 days, a notice mailed to all bill-payers within forty-five days, and a repeat notice mailed every three months thereafter until the violation is resolved. The shift from 14 days to 30 days for the initial notice, with a possible extension for up to three months, is being proposed to help consumers distinguish between those violations posing significant shortterm health risks requiring immediate action (Tier 1) from violations potentially posing health risks but where no urgent action by the consumer is necessary (Tier 2). The 30-day (or three month) period also would give the water system more time to initiate steps to resolve the violation before notifying the consumers.

EPA believes that giving the primacy agency flexibility to adapt the timing requirements to fit specific circumstances is clearly warranted. The violation situations under Tier 2 are very diverse, ranging from violations potentially posing a health risk from short-term exposure to violations posing a chronic risk only from long-term exposure. One size does not fit all. An extension beyond 30 days may be especially appropriate for contaminants posing a chronic rather than acute health risk (e.g., fluoride, arsenic, radium). EPA standards for such contaminants are designed to protect against long-term exposure. An extension may also be appropriate for violations that were quickly resolved and no longer pose any risk to persons served (e.g., some Total Coliform Rule

or Surface Water Treatment Rule violations). Finally, an extension to three months may allow the water system to include the initial notice in the same mailing as the quarterly bill, with no loss in effectiveness.

An alternative option to the approach proposed in today's rule would be to require a three month deadline (rather than 30 days) for delivery of the initial Tier 2 notice, and/or a one-year frequency for repeat notices rather than three months. Under this alternative, the primacy agency would retain the discretion to require the notice sooner on a case-by-case basis or across the board for all Tier 2 violations. EPA requests comment on this alternative approach to the proposal.

### 3. Form and Manner of the Delivery of the Tier 2 Notice

The proposed rule would retain the public water system obligation to provide the Tier 2 notice to persons served by the water system. This is a statutory obligation. The proposed rule, however, would significantly change the specific method of delivery required to meet this obligation. The proposed rule would first set a performance standard: that the notice be provided in a form and manner reasonably calculated to reach persons regularly served by the system. It would also require a specified minimum method of delivery, but then would provide much greater flexibility in what the water system must do to reach other persons regularly served if they are not reached by the minimum method. In contrast, the current rule (for community water systems) first requires a newspaper notice, followed by a notice either mailed or directly delivered to customers. The proposed rule would require that community water systems:

- Mail or otherwise directly deliver the notice to each customer receiving a bill (or other service connections); and
- Use any other method reasonably calculated to reach other persons regularly served by the system if they would not normally be reached by the mail or direct delivery requirement (e.g., newspaper, posting in public places, delivery to community organizations, etc.).

For non-community water systems, the current rule requires posting for as long as the violation exists. The proposed rule would require that noncommunity systems:

- Post or mail or directly deliver to each customer; and
- Use any other method reasonably calculated to reach other persons served by the system if they would not normally be reached by the posting,

mail, or direct delivery requirement (e.g., organization newsletter, delivery of multiple copies to a central location, etc.).

In every case, the proposal would give the primacy agency the option to prescribe a different method of delivery for the water system, based on policies and procedures established as part of their approved primacy program.

EPA believes that in practice, the proposed requirements for method of delivery for the Tier 2 (and Tier 3) notices will ensure that notices announcing violation of drinking water requirements are communicated sooner and more effectively than under the current rule to a wider range of the people served by the water system. At a minimum, those people reached by mail or direct delivery would receive the notice early enough to make informed choices about their drinking water. The notice would also reach other consumers who do not pay water bills and who are not routinely informed of the risk from the drinking water when violations occur.

EPA discussed this provision at length with the States and at various stakeholder meetings. A number of options emerged for delivery of both Tier 2 and Tier 3 notices, ranging from setting a "performance standard" with no minimum method prescribed to retaining the current very prescriptive requirements. The proposal selected was to require a minimum method to deliver the notice, but to broaden the options a water system may select in its efforts to reach other persons served. The option was proposed because it sets a clear and easily understandable minimum for all water systems to follow and requires water systems to follow a deliberate process to determine what else needs to be done to reach other persons served. Compliance requirements under the proposed option would be clear and enforceable.

EPA developed an alternative approach to the proposal that is discussed in Section VI(B) of the Preamble. Comments are requested on both the proposal and the option discussed in Section VI(B).

EPA is requesting comment on the Tier 2 public notification requirements, in particular the list of violations included under Tier 2, the 30-day time period for the initial notice, the requirement for a repeat notice of ongoing violations every three months, the discretion given to the primacy agency to extend the initial notice to three months or the repeat notice frequency to one year (either on a case-by-case basis or by rule), and the revised requirements for the method of delivery

of the Tier 2 public notice. Comments are also requested on the two specific options discussed in Section VI as alternatives to the proposed language.

H. Form, Manner, and Frequency of the Tier 3 Public Notice: All Other Violations and Situations Requiring Public Notice (§ 141.204)

Today's rule proposes to define the form, manner, and frequency of a Tier 3 public notice and to require that public water systems use a Tier 3 public notice.

#### 1. Tier 3 Violations and Situations

The proposed rule would require a Tier 3 public notice for the following violation categories and other situations:

- Monitoring violations, unless the primacy agency determines that the violation requires a Tier 2 or Tier 1 notice;
- Failure to comply with a required testing procedure;
- Operation under a variance granted under Section 1415 or exemption granted under Section 1416 of the SDWA; and
- Any other violations and situations determined by the primacy agency to require a Tier 3 public notice.

The list of violations requiring a Tier 3 notice is similar to the list in  $\S$  141.32(b), the comparable section of the current public notification rule. The language in the proposed rule, however, notes explicitly that the primacy agency may require that public water systems provide a Tier 2 (rather than a Tier 3) notice for specific monitoring or testing procedure violations. This is discussed in Section VI(A).

### 2. Timing of the Tier 3 Public Notice

The proposed rule would require that public water systems provide a Tier 3 public notice to persons served no later than one year after the system learns of the violation or begins operating under a variance or exemption. The proposal would also require the public water system to repeat the notice annually for as long as the violation or situation exists. In contrast, the current rule requires the notice to be mailed within three months (with possible extension to one year at the State's option) and a repeat notice every three months thereafter until the violation is resolved. EPA believes that the annual notice for Tier 3-type situations is appropriate, given the nature of the violation (e.g., for failure to monitor) and the great number of violations requiring such a notice (i.e., 216,522 of the 235,214 violations reported to EPA in FY 1996).

### 3. Form and Manner of the Delivery of the Tier 3 Notice

The proposed rule would require that public water systems provide the Tier 3 notice to all persons served by the water system. This is a statutory obligation that applies for all notices required under the public notification rule. The method of delivery requirements for Tier 3 public notices would be the same as those prescribed for the Tier 2 public notice. A summary of the requirements and a rationale are included in Section V(G) above and in Section VI(B).

Water systems have the option under the proposed rule to provide an annual notice summarizing all Tier 3 violations occurring during the previous year in lieu of individual Tier 3 public notices. For community water systems, the proposal would allow the Consumer Confidence Report (CCR) to be used as the vehicle for notifying persons served of violations occurring during the previous year. The CCR is the appropriate vehicle for initial public notices as long as the public notification timing and distribution requirements are met. In particular, the CCR must be mailed or hand-delivered to persons served and it may only include those violations occurring within 12 months of publication. The advantages to using an annual notice instead of individual notices for every violation are compelling, both in terms of reduced cost and in terms of effective communication with the consumers. Since the vast majority of violations require a Tier 3 public notice, the burden on public water systems would be dramatically reduced through use of an annual notice. EPA strongly recommends that public water systems make use of the annual notice option.

EPA is requesting comment on the proposed Tier 3 public notice requirements, in particular on the option to allow public water systems to provide an annual report of violations in lieu of individual notices twelve months after each violation. Comments are also requested on the use of the Consumer Confidence Report to meet the Tier 3 public notification requirements. Finally, comments are requested on the revised requirements for the method of delivery of the Tier 3 notices. See Section VI(B) for a discussion of an alternative to the proposed method of delivery for Tier 3 public notices.

### I. Content of the Public Notice (§ 141.205)

Today's proposal specifies a list of elements that must be included in a public notice both for water systems with violations of National Primary

Drinking Water Regulations and for water systems operating under a variance or exemption. The proposed rule would carry forward from the current rule the requirement that water systems use standard health effects language for MCL, MRDL, and treatment technique violations. The health effects language in the proposed rule would be simplified in response to concerns raised by various stakeholders and the GAO report that the current mandatory health language is too lengthy and not focused on the core health effects information consumers need to know. The proposed rule also would add new standard language for monitoring violations. Finally, it would add new standard language to encourage the recipients of the public notice to distribute the public notice to others served by the water system.

Note that the States may establish alternative public notification requirements related to the content of the public notice (as part of their primacy program revision under 40 CFR 142.16(a)(3)), as long as these alternative requirements provide the same type and amount of information and are designed to achieve an equivalent level of public notice as EPA's regulation. This would allow the States, for example, to submit to EPA for approval a primacy program revision that includes alternatives to the required language on health effects, monitoring violations, or distribution of the notice to others.

### 1. Standard Elements of the Public Notice (§ 141.205(a)–(c))

The proposed rule would revise and edit the list of standard elements required in public notices.

- Ten elements would be required (under § 141.205(a)) for public notices for violations of the NPDWR: a description of the violation that occurred (including the contaminant level): when the violation occurred: any potential adverse health effects; the population at risk; whether alternative water supplies should be used; what actions consumers should take; what the system is doing to correct the violation; when the water system expects to return to compliance; the phone number of the water system owner or operator; and a statement appended to the notice to encourage notice recipients to distribute the notice to other consumers who might not have received their own copy of the notice.
- Four elements would be required (under § 141.205(b)) for public notices for water systems operating under a variance or exemption: an explanation for the reasons for the variance or exemption; the date the primacy agency

granted the variance or exemption; a brief status report on compliance with the variance or exemption conditions; and a notice of any opportunity for public input into the review of the variance or exemption. Note that this information is identical to that already required to be included in the CCR. Community water systems that use the CCR as the vehicle for the initial public notices would not need to add any additional information to meet the content requirements for the variance and exemption notices required under this proposal.

• Four performance standards will be listed (under § 141.205(c)) defining the adequacy of the notice: the notice must be displayed in a conspicuous way (where applicable); must not contain overly technical language or very small print; must not be formatted in a way that defeats the purpose of the notice; and must not contain language that nullifies the purpose of the notice.

• For public water systems serving a large proportion of non-English speaking consumers (as determined by the primacy agency), the public notice would be required to contain information in the appropriate language regarding the importance of the notice or contain a telephone number or address where persons served may contact the water system to obtain a translated copy of the notice or to request assistance in the appropriate language.

The proposed rule (under § 141.205(a)) would edit and rearrange the list of required elements from the current rule. The most significant change to § 141.205(a) is to require that the notice for MCL and MRDL violations include the contaminant level. The proposed rule also would add a new section § 141.205(b) setting the required elements for a variance or exemption notice. This would be added to cover the specific notice requirements unique to water systems operating under a variance or exemption.

The proposed rule would modify the current rule by requiring public water systems serving a large non-English speaking population (as determined by the primacy agency) to either include information regarding the importance of the notice in the appropriate language, or provide a water system contact to assist the non-English speaking consumers. The current rule under § 141.32 (d) sets a similar requirement, but in much more general terms, requiring simply that the notice shall be multi-lingual where appropriate. The proposed public notification requirement is identical to the provision contained in the Consumer Confidence

Report (CCR) regulation, 40 CFR Part 141, Subpart O [63 FR 44511 (August 19, 1998)]. Under the proposed rule, public water systems serving a large non-English speaking population would be required at a minimum to take concrete steps to communicate the importance of the notice in the appropriate language so that non-English speakers could get assistance in understanding it. EPA encourages water systems to go beyond this minimum and provide a translated copy of the notice on request or offer telephone assistance in the appropriate language. The draft Public Notification Handbook issued with the proposed rule for comment contains sample language regarding the importance of the notice in various languages as well as complete sample Tier 1 public notices in Spanish.

EPA modified the list of elements to be required in the public notice in response to stakeholder requests to provide clearer national minimum standards for notice content and consistency. Comments are requested on the list of elements in the proposal, the four performance standards identified for how the notices must be presented, and the more specific requirement for public water systems to communicate with large non-English speaking populations about the importance of the public notice when violations occur.

### 2. Standard Health Effects Language (§ 141.205(d)(1))

The proposed rule would retain the requirement that all public notices for MCL and treatment technique violations use mandatory health effects language to explain the health risks posed by the violation. The language being proposed today in Subpart Q, Appendix B is identical to the language promulgated in the Consumer Confidence Report (CCR) regulation, 40 CFR Part 141, Subpart O, Appendix C. The proposal would replace language in the current rule that was added when each NPDWR was promulgated. The proposed language is shorter, simpler, and consistent with the language EPA uses in similar outreach forums and documents.

EPA is proposing to use the language for the public notification rule that is identical to health effects language from the CCR regulation because it does not make sense to draft different language to meet such a similar requirement, unless there is a compelling reason that is specific to the intent of the public notification provision. Although EPA recognizes that the CCR and public notice may be given at different times and may be intended to meet different objectives, EPA believes that the benefits of having identical language to

communicate the same health effects from violations outweighs the value of tailoring the language to the unique objectives of the public notice. EPA expects that public water systems will supplement the mandatory health effects language or otherwise put the language in the context of the overall notice to meet the unique purposes of the specific public notice. Examples of public notices applicable to different situations are included in the draft Public Notification Handbook which is being issued concurrently with this proposed rule for comment.

EPA is requesting comment on the proposal to use the CCR standard health effects language to meet the public notification requirement. In particular, EPA is soliciting comment on specific situations or violations where the CCR language is believed to be inappropriate or incomplete. Recommendations for alternative language for such situations would also be helpful.

# 3. Standard Language for Monitoring and Testing Procedure Violations (§ 141.205(d)(2))

The proposed rule would add a new section requiring that all public notices contain standard language for monitoring and testing procedure violations. The proposed standard language informs consumers that because the water system did not monitor or follow the required testing procedure during the compliance period, the presence or absence of the contaminant during that time could not be determined and the water system is unable to tell whether there was a risk to health during that time. This new mandatory language is being proposed because of stakeholder concerns that consumers may presume that because there is no reported MCL, MRDL, or treatment technique violation that the drinking water provided by their water system is safe. This may not always be an appropriate presumption. The mandatory language as proposed is intended to be included in all public notices for monitoring and testing procedure violations.

The proposed standard language was developed after the EPA workgroup (in consultation with a number of States) considered alternative approaches. EPA is soliciting comment on the proposed standard language and welcomes recommendations on alternative language that would effectively inform consumers of the significance of the monitoring violation. In particular, EPA will consider alternatives to the phrase "\* \* and we are unable to tell whether your health was at risk during that time." The phrase is included in

the proposal to clearly and simply alert consumers that lack of monitoring may disguise a potential risk to health. It is intended to raise questions about the significance of the specific monitoring violation, not to alarm consumers unnecessarily. EPA recognizes that many monitoring violations pose no risk to health and that most water systems resume monitoring quickly after a single violation. The proposed standard language will be most effective where the water system supplements the standard language with a clear explanation of what the violation meant and how it was rectified. EPA will consider options to this standard language in its final rule.

Another option would be not to require that any specific language be included for all monitoring violations, but to set a performance standard instead. The performance standard might be that all monitoring violations be explained in a way that appropriately communicates the public health significance of the violation. EPA also requests comment on this alternative approach.

4. Standard Language to Encourage Customers Receiving the Public Notice To Distribute the Notice to Other Persons Served (§ 141.205(d)(3))

The proposed rule would add a new section requiring that public notices contain standard language encouraging the customers receiving the public notice to distribute the notice to other persons served by the water system (such as tenants, residents, patients, etc.). Mailed notices, in particular, are routinely sent to only the bill-paying customers, and therefore may not reach some consumers at risk unless actions are taken to notify them of the violations. EPA believes that this standard language is appropriate as a safety net and necessary to encourage those receiving the public notice to take steps to alert others of the violations and potential risk from drinking water. Compliance with this requirement is one of the "reasonably-calculated steps" a public water system must take to reach other persons not expected to receive the initial notice. EPA requests comment on the proposed standard language and would welcome alternative language that aids the water system in reaching all persons served.

### J. Other Public Notification Requirements

### 1. Notice to New Billing Units or New Customers (§ 141.206)

EPA is proposing to modify the current regulatory provision requiring

that community water systems send a copy of the most recent public notice to all new billing units for ongoing MCL and TT violations or existing variances and exemptions. The proposed rule would broaden the requirement to include notice for on-going monitoring and testing procedure violations and adds a new provision requiring noncommunity water systems to continuously post the notice or otherwise take steps to inform new customers of any ongoing violations. EPA is proposing this change to the existing requirement to better ensure that new customers served by all public water systems are made aware of any continuing violations of drinking water standards. The initial notice, if posted in a location where new consumers pass by, will meet this new requirement. However, water systems that deliver the initial notice by hand delivery or otherwise have the notice out of sight of new consumers would have an additional responsibility under this new provision. EPA believes this new provision will make notices more readily available to new consumers not receiving the notice under the current regulation. EPA requests comment on the change to the current regulation extending the requirement to cover ongoing monitoring and testing procedure violations and to require that the notice be provided to new customers by both community and non-community water systems.

2. Special Notice To Announce the Availability of the Results of Unregulated Contaminant Monitoring (§§ 141.207 and 141.35)

Section 1414(c)(2)(E) of the SDWA, as amended in 1996 gives EPA the authority, at its option, to require public water systems to give notice to persons served of the concentration levels of unregulated contaminants, where such monitoring is required by EPA. The authority for EPA to require such notice was part of the SDWA prior to the 1996 amendments. However, the 1996 SDWA amendments, under Section 1445(a)(2)(E), now require public water systems to give notice of the results of the unregulated contaminant monitoring required by EPA to persons served by the system. EPA believes that the intent of these statutory provisions is met by the existing public notification provision under § 141.35, as amended under this proposal. Section 141.35 requires water systems to announce the availability of the results of required unregulated contaminant monitoring through the public notice process. Further, the CCR regulation requires the results of such monitoring to be

included in the annual CCR. Together, the two existing requirements meet the public-right-to-know objective and are protective of public health.

EPA is proposing to amend the current provision under § 141.35 and move the amended provision to the new Subpart Q. The current provision requires that the water systems give notice of the availability of unregulated contaminant monitoring results within three months of receiving the results. The amended requirement under § 141.207 retains the same reporting requirement but changes the timing from three months to twelve months after the results are known. The proposed change in the timing of the public notice is to allow water systems, at their option, to report the availability of all the results just once during the year, reducing the number of notices from four to one. For community water systems, the annual reporting requirement can also be met through the CCR, which already must include the actual results of the unregulated contaminant monitoring. EPA believes close coordination between the public notification requirement and the CCR reporting requirement for this information will be both more efficient and less confusing to the regulated community and the public.

EPA requests comment on the proposed approach to meet the requirements under Sections 1414(c)(2)(E) and 1445(a)(2)(E). EPA also requests comment on its proposal to shift the reporting frequency announcing the results of unregulated contaminant monitoring from three months to twelve months.

3. Special Notice for Exceedance of the Fluoride Secondary Maximum Contaminant Level (SMCL) (§ 141.208)

EPA is proposing to modify the standard language and to make other minor changes to the existing special notice currently required under § 143.5 for community water systems that exceed the SMCL for fluoride. The proposal would move the revised special fluoride notice requirement into the new Subpart Q public notification provision. The special public notice for exceedances of the SMCL is to alert persons served that the fluoride levels in the drinking water may pose a cosmetic dental risk to children under nine years old. The SMCL is 2 mg/l. The annual public notice would continue to be required whenever drinking water monitoring shows fluoride levels above 2 mg/l but below the MCL violation level of 4 mg/liter. The public notice requirements for violations of the fluoride MCL would be addressed

separately from the special fluoride SMCL public notice required under § 141.208.

The proposed regulation under § 141.208 will make two changes to the current public notice requirements for exceedance of the fluoride SMCL:

• To require that the form and manner of the special notice follow the Tier 3 requirements in §§ 141.204(c) and 141.204(d) of the proposed rule; and

 To revise and simplify the mandatory language, consistent with the format used to develop the revised standard health effects language for MCL, MRDL, and TT violations.

The proposed requirement that the notice be provided within 12 months from the day the water system learns of the exceedance, is unchanged from the

existing requirement.

EPA believes it is important to retain the existing fluoride SMCL notice requirement with only minor conforming changes. Consumers have a right to know about the cosmetic effects from dental fluorosis that may occur in children from prolonged exposure to drinking water exceeding the fluoride SMCL. The notice requirement for exceedance of the fluoride SMCL at 40 CFR 143.5 was put in place when the fluoride national primary drinking water regulation (NPDWR) was published in April 2, 1986 [50 FR 11396]. The fluoride NPDWR replaced the more stringent MCL in place as an interim standard since the original SDWA in 1974. The interim MCL of 2 mg/l became the SMCL when the final primary standard was published on April 2, 1986. Part of the justification for reducing the stringency of the MCL from 2 mg/l to 4 mg/l was that the public would be notified of the potential for developing dental fluorosis from exposure to their drinking water when the levels exceeded 2 mg/l.

EPA considered a number of options changing the current fluoride SMCL notice requirements, ranging from eliminating the notice altogether to requiring the notice every three months rather than 12. EPA also discussed extending the SMCL notice requirement to NTNCWS, as the risk to children from drinking water exceeding the SMCL from schools and day-care centers (e.g., NTNCWS) may be as great as drinking such water from their primary residences (e.g., CWS). Although NTNCWS are not currently required to monitor for fluoride under EPA's current regulations, and therefore the EPA SMCL notice requirement does not apply, EPA recommends that both CWS and NTNCWS known to be providing drinking water with fluoride levels

exceeding 2 mg/l provide the special SMCL notice to persons served. After reviewing the various options, EPA sees no reason to re-open the decision made at that time to require the notice only when CWSs exceed the SMCL of 2 mg/l

EPA requests comment on whether EPA should retain the special public notice for exceedance of the fluoride SMCL and, if retained, whether retaining the requirement allowing the public notice to be given 12 months after the exceedance is known is sufficient. EPA also requests comment on whether the revised mandatory language better communicates the purpose of the notice and the cosmetic risks from drinking the water.

4. Conditions Under Which the Primacy Agency May Give Notice on Behalf of Public Water System (§ 141.209)

EPA is proposing to retain the provision in the current rule specifying under what conditions the primacy agency may give notice on behalf of a public water system. Under this provision, the primacy agency may give a public notice for the public water system if all public notification requirements are met. The responsibility to comply, however, would always remain with the public water system. EPA requests comment on the proposal to retain this provision.

K. Reporting to the Primacy Agency and Retention of Records (§§ 141.31 and 141.33)

Under the current § 141.31, public water systems are required to submit copies of all public notices to the primacy agency within 10 days of completing each public notice. EPA is proposing to amend the existing reporting requirement under § 141.31 by also requiring public water systems to submit a certification to the primacy agency that all public notification requirements have been met. EPA considered a number of options to the proposal to require that public water systems certify after each violation that all public notification requirements were met:

• One option was to broaden the proposed certification provision to require a public water system to not only certify that it met the public notice requirements but also to explain how the requirements were met. EPA decided not to propose this broader requirement because such additional reporting is resource intensive and unnecessary in most cases. The requirement for water systems to send copies of all notices with a simple certification of compliance provides

sufficient information for primacy agencies to identify non-compliers.

• A second option was to leave the existing reporting provision unchanged, with no certification required. EPA believes that a self certification of compliance to the primacy agency (with copies of the notices) saves primacy agency resources and allows better targeting of non-compliers.

• A third option was to shift the 10-day requirement to submit the certification and copies of notices to the primacy agency to 30 days, three months, or even a year after the public notice. EPA is proposing to maintain the existing 10-day requirement to give primacy agencies enough information to immediately target non-complying water systems. The potential for such immediate feedback where a certification is not received will increase voluntary compliance.

The proposal would also amend § 141.33 to require that public water systems retain public notification records for three years. The current regulation has no provision for retention of public notification records. A record retention requirement for public notices conforms with the requirements already in place for other EPA regulatory requirements (e.g., sampling results, CCRs, variances and exemptions). The record retention period of no more than three years is consistent with the limits set in the Office of Management and Budget regulations at 5 CFR 1320.5 implementing the Paperwork Reduction

Regulations at 5 CFR 1320.5, governing the imposition of reporting and record keeping requirements by Federal agencies on the public, specify that those reporting information should not be required to retain records (other than health, medical, government contract, grant-in-aid, or tax records) for more than three years, unless the agency demonstrates that a longer retention period is necessary to satisfy statutory requirements or other substantial need. These regulations were published by the Office of Management and Budget to implement the Paperwork Reduction Act goal of minimizing the paperwork burden for individuals, small businesses, education, and non-profit institutions, Federal contractors, state, local, and tribal governments, and other persons resulting from the allocation of information by or for the Federal government. In accordance with these regulations, EPA is proposing a 3-year record retention requirement for public notification records.

EPA is also asking for comment on an alternative to the proposal that would extend the record retention period from

three years to five years for public notification records. EPA believes that the public notification regulation is important to public health because of the important health information provided to the public upon finding a violation. Because of the public health protection provided by this regulation, all enforcement options should be maintained by the Agency and citizens using the citizen provisions of the SDWA. Record retention will ensure speedy and less costly enforcement. This alternative to the proposal would ensure that records are available to EPA and citizens to support penalty enforcement actions for the full five year federal statute of limitations. A five-year retention period for public notification records would also be consistent with the retention period for the related CCR regulation.

EPA requests comment on the reporting and record-keeping proposal, including the alternative to the proposal to set the retention period for records under the public notification regulations to five years. EPA also requests comment on whether the record retention periods required under the related CCR regulation should be adjusted to three years, if necessary to be consistent with the final public notification retention requirement and Paperwork Reduction Act regulations.

L. Special State/Tribal Primacy Requirements and Rationale (40 CFR Part 142, Subpart B)

The rule being proposed today would amend §§ 142.16 and 142.10 of the primacy regulations (40 CFR Part 142, Subpart B) to define the requirements that States (including eligible Indian Tribes) must follow to incorporate the revised public notification regulations into their approved primacy program. The proposed rule also revises § 142.14 to require that the State retain, for three years, the certifications and public notices received from the public water systems and any determinations establishing alternative public notification requirements. Finally, the proposal revises § 142.15 to reaffirm the requirement that the State report violations of the public notification regulations on a quarterly basis to EPA.

The proposed changes to the primacy requirements for the revised public notification rule would amend both §§ 142.10 and 142.16(a). Under the primacy regulations, a State is required to adopt, as a condition of primacy, a State rule that is no less stringent than the regulation being proposed today. The requirements States must meet to receive primary enforcement responsibility ("primacy") are listed in

§ 142.10 and requirements to revise an approved primacy program are in § 142.12. Under § 142.10(b)(6)(v), each State with primary enforcement responsibility must adopt and implement adequate procedures to require public water systems to give public notice that is no less stringent than the EPA public notification requirements. Special primacy requirements unique to specific regulations are in § 142.16. The special primacy requirements for the public notification regulation are in § 142.16(a).

EPA is proposing to amend § 142.10(b)(6)(v) to replace the existing citation with the new public notification citation (40 CFR Part 141, Subpart Q). The proposed change to § 142.16(a) would delete the existing language and replace it with a new section comprised of three elements.

First, § 142.16(a)(1) would require primacy States to submit requests for approval of a revised primacy program adopting the new public notification requirements under 40 CFR Part 141, Subpart Q. States will have two years after the final rule is published in the **Federal Register** to submit a complete and final primacy program revision package to EPA, unless the State requests and EPA approves an extension of up to two additional years.

Second, § 142.16(a)(2) would require that States establish, as part of their revised primacy program, enforceable requirements and procedures when the State opts to use the authority under:

- § 141.201(a)—To require public water systems to give a public notice for situations other than those listed in Appendix A, where the State determines that the situation has significant potential for serious adverse effects on human health;
- *§* 141.202(a)—To require public water systems to give a Tier 1 public notice (rather than a Tier 2 or Tier 3 notice) for violations or situations other than those listed in Appendix A;
- § 141.202(b)(3)—To require public water systems to comply with additional Tier 1 public notification requirements set by the State subsequent to the initial 24-hour notice, as a result of their consultation with the State required under § 141.202(b)(2);
- § 141.203(a)—To require the public water systems to provide a Tier 2 public notice (rather than Tier 3) for monitoring or testing procedure violations specified by the State;
- § 141.203(b)—To grant public water systems an extension of time (up to three months) for distributing the Tier 2 public notice, for specific circumstances defined in the State's primacy program;

• § 141.203(b)—To require a different repeat notice frequency for the Tier 2 public notice (to be no less frequent than once per year), for specific circumstances defined in the State's primacy program; and

primacy program; and • §§ 141.203(c) and 141.204(c)—To require a different form and manner of delivery for Tier 2 and 3 public notices.

Third, § 142.16(a)(3) would allow the State to establish, by rule, alternative public notification requirements from those established in the rule being proposed today. Section 142.16(a)(3) incorporates language in § 1414(c)(2)(B) of the SDWA, as amended in 1996, defining the alternative program. Under this section, a State may develop an alternative program with respect to the form and content of the notice, as long as the program contains the same amount and type of information. EPA is proposing to interpret the "no less stringent" standard of EPA's primacy regulations as requiring States to maintain the same type and amount of information as EPA's rule. The State alternative public notification program would have to be approved by EPA as part of the process established under the primacy rule to review revisions to approved primacy programs.

EPA is requesting comment on the proposed requirements States would have to follow to develop the approved primacy program revision and on other changes to the State record keeping and reporting requirements related to the public notification rule. EPA is also requesting comment on the proposed interpretation of the primacy standard to be applied for review of State

alternative programs.

### V. Relationship of Public Notification Regulation to Consumer Confidence Report (CCR) Regulation

The rule being proposed today would be closely related to the Consumer Confidence Report (CCR) regulation promulgated in August, 1998 [63 FR 44511 (August 19, 1998)]. In developing the proposal for the public notification rule, EPA identified provisions of both rules that either overlap or need to be consistent. The proposed rule has used identical language from the CCR rule where there was an overlap, deferred to the CCR process where the public notification objectives could be effectively accomplished through the CCR, and otherwise used language consistent with the CCR when it was appropriate.

• Health Effects Language (\$141.205(d)(1), Appendix B). Language on health effects of violations is required both for the CCR and public notification. EPA is proposing that the

health effects language for the public notice would be identical to the language in the CCR (§ 141.153(d)(6), Appendix C).

• Use of CCR for Some Public Notices  $(\S 141.204(d))$ . The annual CCR requires an annual summary of all violations that have occurred in the last year (§ 141.153(f)). EPA is proposing today that community water systems, at their option, use the Consumer Confidence Report as the mechanism to notify their customers of any or all Tier 3 violations as long as those violations occurred within the last 12 months (see discussion in part IV(H) above). EPA is also proposing that public water systems not required to distribute a CCR consider an annual report of all their Tier 3 violations or variance or exemptions, in lieu of individual public notices. In all cases, the CCR or other annual report would have to follow the requirements of the public notice rule to be used for this purpose.

• State Primacy Requirements (§ 142.216(a)). Both the CCR and the public notice regulations must be adopted by the State as a condition of primacy. EPA is proposing today that the standards and process for primacy approval for the public notification rule would follow the same requirements contained in the CCR rule (§ 142.16(f)).

· Notice of the Availability of the Results of Unregulated Contaminant Monitoring § 141.207). The 1996 SDWA amendments for both the CCR and public notification contained provisions related to giving notice of the results of unregulated contaminant monitoring required by EPA. The CCR provision makes such reporting mandatory (§ 141.153(d) and (e)). The public notice provision (§ 1414(c)(2)(E)) requires such reporting at the option of the EPA Administrator. EPA is proposing today to defer to the requirement that such information be included in the annual CCR for community water systems. EPA is also proposing today to continue (with some revisions) to require that community water systems give notice of the availability of the results of the unregulated contaminant monitoring

now required under § 141.35.
• Certification by PWS That Public
Notification Requirements Are Met
(§ 141.31(d)). The proposed rule would
add a new requirement that public
water systems submit a letter to the
primacy agency certifying that all
requirements have been met. This
would be consistent with the
certification requirement in the CCR
regulation (§ 141.155(c)).

• Use of Multilingual Notices (\$141.205(c)(2)). The CCR regulation requires that in communities with a

large population of non-English speaking residents, as determined by the primacy agency, the report must contain information in the appropriate language(s) regarding the importance of the notice or contain a telephone number or address where persons served may contact the water system to obtain a translated copy of the notice or to request assistance in the appropriate language. The proposed public notification would be identical to the provision in the CCR rule (§ 141.153(h)(3)).

EPA is requesting comment on the approach in the proposed rule to align the public notification requirements with the parallel requirements in the CCR rule for the six areas identified above and for any other areas that would make compliance with the two rules more effective and efficient.

### VI. Request for Public Comment on Alternatives to Proposal

EPA has requested comment throughout this preamble on the various elements of the regulation proposed today. EPA is requesting here comments on two specific options that are alternative approaches to what is being proposed. EPA will consider comment on these two alternative options to determine the final rule requirements.

#### A. Requiring Tier 2 Public Notice for Monitoring and Testing Procedure Violations

During the development of the proposed public notice requirements for specific violations, several options emerged for the proper placement of monitoring and testing procedure violations. Over 90 percent of all violations of National Primary Drinking Water Regulations are monitoring and testing procedure violations. These violations range in severity from an administrative error quickly corrected to failure to monitor over the whole year. EPA is proposing that the public notice for all monitoring and testing procedure violations follow the Tier 3 annual notice requirements, unless the primacy agency determines on a case-by-case basis that the more stringent Tier 2 notice is necessary. EPA believes that Tier 3 notices are appropriate for the vast majority of monitoring violations because they are unlikely to result in significant health threats. Recognizing, however, that in some cases they may disguise such a threat, EPA is providing flexibility to the primacy agency to place monitoring violations in Tier 2 (or even in Tier 1) on a case-by-case basis. EPA is concerned that requiring more frequent notices for monitoring and testing procedure violations on a routine basis may dilute the effectiveness of the public notification process.

Some stakeholders have expressed concern that this proposal was not sufficiently protective of public health and the consumer's right-to-know. They argue that placing all monitoring and testing procedure violations in Tier 3, even though the primacy agency has the option to place them in a higher tier when warranted, may in some cases increase the possibility that timely public notices for serious violations would not be made. In cases where inadequate monitoring disguises MCL or TT violations, the lack of timely notice may pose a risk to public health.

EPA is, therefore, requesting comment on an alternative to the proposal that would require public water systems to use Tier 2 (rather than Tier 3) public notice for monitoring and testing procedure violations. Under this alternative proposal, primacy agencies would be allowed, by rule, to designate some or all monitoring and testing procedure violations as Tier 3 rather than Tier 2. The presumption under this alternative is that the violation would require a Tier 2 notice unless the primacy agency decided otherwise (as part of its approved primacy program). Another option would be to allow the primacy agency to classify monitoring and testing procedure violations as Tier 3 on a case-by-case basis. Both the proposed language and these alternatives give the primacy agency flexibility to tailor the public notice to the seriousness of the violation. The difference lies in what the default would be in the absence of action by the primacy agency. Because EPA believes that Tier 3 is appropriate for the vast majority of monitoring and testing procedure violations, the proposed rule makes Tier 3 the default.

Comments are requested on these alternative proposals for determining the proper public notice tier for monitoring and testing procedure violations.

### B. Giving PWS Flexibility in Method of Delivery of Tier 2 and 3 Notices

The proposed rule would require that community water systems mail or directly deliver notices to bill-paying customers (or service connections) and use any other method reasonably calculated to reach other persons if they would not normally be reached by the mail or direct delivery requirement. The proposed rule has a parallel provision for non-community water systems, allowing posting in lieu of mail or hand delivery.

EPA discussed this provision at length with the various stakeholder

groups. EPA is asking for comment on an alternative to the proposed language that would allow the public water system to choose from a longer list of possible delivery methods. Unlike the proposal, the alternative would not require a specific method to be used by all the water systems (e.g., mail or direct delivery by all community water systems). In both the proposed language and this alternative, the water system's obligation under the rule would be the same: to take steps reasonably calculated to reach all persons served.

The advantage of this alternative is that it gives the water system a menu of methods to choose from to reach all persons served, which encourages creative and more efficient solutions than possible under the proposal. It recognizes the need to tailor the methods of delivery used to the specific situation. The disadvantage is that it sets a less precise regulatory obligation that may lead to inadequate compliance with the intent of the public notice provision. It may also be more difficult for EPA and the States to enforce this less precise requirement.

EPA is requesting comment on this alternative to the language in the proposal for delivering Tier 2 and Tier 3 notices. If the alternative is chosen in the final rule, what optional methods should EPA include in the regulatory list of acceptable delivery methods?

#### VII. Cost of Rule

EPA has estimated the costs for both public water systems, which must comply with the requirements of the proposed public notification rule, and the State primacy agencies, which must implement the new requirements on behalf of EPA.

For public water systems, the estimated costs of complying with the new regulation are divided into three component activities: notice preparation costs, notice distribution costs, and costs of repeat notices. Only public water systems with a violation or other situation requiring a public notice incur costs under this rule. Notice preparation costs include those costs that a public water system must incur to comply with the requirements regardless of how many copies of the notice it must deliver. These costs include the labor hour costs associated with becoming familiar with the requirements for the notice, collecting data regarding monitoring results and the violation, consulting with the primacy agency (when necessary), preparing the technical content of the public notification in a format suitable for distribution, identifying the recipients of the notice, and providing instructions about production of the notice. Notice distribution costs are costs that increase or decrease along with the number of public notices to be delivered. These costs include costs of producing the reports (costs of paper, photocopying or printing, and labels), postage costs when the notice is mailed, costs of a notice in a newspaper when necessary, costs of posting notices in specified locations, and other labor hour costs of producing and delivering the notices. Repeat

notice costs involve only the costs of delivering a second copy of the notice, if the violation is not corrected within the specified time period.

For primacy agencies, the estimated incremental costs of implementing the new requirements are also divided into three components: costs of consulting with public water systems to clarify notice requirements on a case-by-case basis; costs of receiving and reviewing the public water system compliance

certification and copies of the notices; and costs of filing and maintaining the public notification records.

Table C provides a summary of the estimated total dollar and hour costs to public water systems and to the State primacy agencies. The public water system costs are broken out by size of the system. The combined total cost per year to both the PWS and the primacy agencies is \$17,956,117. The combined total burden hours are 972,107.

TABLE C.—AVERAGE ANNUAL COST AND LABOR HOURS FOR PUBLIC WATER SYSTEMS AND PRIMACY AGENCIES

Summary table	Total cost per year 1	Total labor hours	Number of systems in violation <sup>2</sup>	Labor hours per system (2)/(3)	Cost per system (1)/(3)
	(1)	(2)	(3)	(4)	(5)
Public Water Systems (PWS):     PWS serving 25–500     PWS serving 501–3,300     PWS serving 3,301–10,000     PWS serv. 10,001–100,000     PWS serving over 100,000  Totals for PWS:	\$6,867,175 1,804,545 1,266,782 2,614,813 3,837,948 16,391,263	686,718 146,732 36,718 36,186 4,634 910,987	40,467 4,473 912 667 53 46,572	16.97 32.80 40.26 54.25 87.42	\$169.70 403.43 1,389.02 3,920.26 72,414.11 351.96
State Primacy Agencies	1,564,854	61,120	56 primacy agencies.	1,091.0 hours per primacy agency.	\$27,944.00 per primacy agency.
Totals	17,956,117	972,107			

The Agency estimates that the annual cost to all public water systems with one or more violations during the year is \$16,391,263, including the costs for 910,987 labor hours and the costs for postage and other related O&M costs. This is an average annual cost of \$351.96 for the 46,572 public water systems required to comply with the public notice requirements because they had one or more violations during the year. As shown in Table C, per system costs and labor hours vary most significantly by size of the water system:

- The dollar costs include both labor hour costs and non-labor costs. The non-labor costs incurred are principally to cover costs of the postage to mail the notice. Because the cost of distribution varies directly with the number of persons served, the cost per water system for the large and very large water systems is many times higher than the cost per water system for small and very small systems (e.g., \$169.70 per system serving less than 500 people vs. \$72,414.11 per system serving over 100,000).
- The labor hours vary by both the type and size of the water system. For example, a non-community water

system may post the notice, a significantly lower labor hour burden than preparing a mailing or hand delivering the notice. System size also makes a significant difference in total labor costs. The labor estimated to prepare and distribute the notice for a very small system is 14.7 hours. For very large systems, the labor hour estimate is 90.8 hours, more than six times the rate estimated for the very small systems.

The Agency estimates the annual primacy agency costs and labor hours to be \$1,564,854, and 61,120 hours. The average annual cost per primacy agency is estimated at \$27,944 per primacy agency (\$1,564,854 divided by 56) and the annual labor hours per primacy agency are estimated at 1,091 hours per primacy agency (61,120 divided by 56). This does not include the costs to EPA of implementing this regulation where EPA directly implements the regulatory program on Indian lands.

The paperwork burden associated with the existing public notification requirements in 40 CFR Part 141.32 is currently included in the baseline drinking water ICR (OMB Control No. 2040-0090, EPA ICR #270.39). The

estimated burden under ICR #270.39 is 955.191 hours, and the costs are \$21,969,393. This is the estimated cost to public water systems only, as the approved ICR did not include any incremental costs to the primacy agencies.

To estimate the *change* in the burden under the proposed rule to public water systems, EPA re-calculated the burden numbers under the current rule to provide a common basis for comparing the existing rule with the proposed rule. The existing ICR estimate could not be used as the basis of comparison because it used different lower external cost and workload assumptions. First, the cost assumptions in the current ICR used different postage and labor rates. Second, the current ICR assumes different violation levels than the proposed ICR. Third, some activities, such as repeat notices, were omitted from the current estimate.

The combined changes in burden and cost to both primacy agencies and PWSs, based on comparing the proposed rule estimate to the adjusted current rule estimate, are shown in the table below:

<sup>&</sup>lt;sup>2</sup>Table C–4, PWS (and Pop.) in Violation by System Size, National Public Water System Supervision Program, Draft Compliance Report, FY 1996, data for FY 1996.

BURDEN AND COST ESTIMATES UNDER THE CURRENT AND PROPOSED RULES (FOR PWSs AND PRIMACY AGENCIES)
[Rounded to Nearest 10,000 for Burden Hours and Nearest \$100,000 for Cost]

	Current rule (Re-cal- culated) 1	Proposed rule ICR	Decrease	Percent change
Burden Cost	1,200,000	970,000	230,000	19.2
	\$27,000,000	\$17,900,000	\$9,100,000	33.7

<sup>&</sup>lt;sup>1</sup>To make the current rule estimate and proposed rule estimate comparable, the current rule estimate is adjusted to be the sum of the costs under the proposed rule plus the estimated cost savings that will be realized under the proposed rule.

Two programmatic changes associated with the proposed rule account for the bulk of the reduction in burden and cost estimates from the current rule.

- The proposed rule changes both the timing and method of delivery options for Tier 3 violations—
- The proposed rule would require notice within one year after the occurrence of the violation rather than within three months, as required by the current rule. Systems with monitoring and testing procedure violations occurring several times throughout the year are able under the proposed rule to consolidate their notices into one annual notice. The current rule limits the PWS's ability to combine multiple violations into a single notice to those occurring within the prior three months. For estimating the burden reduction from this change, EPA assumes that, under the current rule, systems with violations send out an average of 1.5 notices per year.
- The proposed rule allows community water systems to meet the public notice requirements for Tier 3 through the existing Consumer Confidence Report (CCR). Tier 3 violations are primarily monitoring or testing procedure violations. Systems that would otherwise incur a large labor burden and postage burden for distributing a mail notice and paying for a newspaper notice will be able to insert the text of the notice into the CCR and incur no additional costs. EPA estimates that half of all community water systems serving less than 10,000 and all community systems serving more than 10,000 will use the CCR for Tier 3 notices.
- —The estimated burden reduction for the proposed changes to the timing and method of delivery for Tier 3 notices is approximately 210,000 hours (17.5 percent) and the cost reduction is approximately \$6,500,000 (24.1 percent).
- The proposed rule changes the required methods of delivery for Tiers 1 and 2 notices. The existing rule requires both newspaper and mail delivery for all tiers, although the primacy agency

may waive the mail requirement if it determines the violation has been resolved within a given time. Those systems for whom no newspaper outlet is available are allowed to hand deliver or post instead of mailing and using the newspaper. Under the current rule, systems with Tier 1 violations must also issue a notice via television or radio. The proposed rule requires only one method of delivery for Tier 2—mail or hand delivery (or posting for noncommunity systems). The burden reduction for Tier 2 is small, because it eliminates only newspaper notices, which are estimated to take only 1 hour of labor. For Tier 1, however, systems will have the option of issuing the notice via electronic media, hand delivery, or posting. The burden reduction resulting from the change in the Tier 1 and Tier 2 method of delivery requirements in the proposed rule would be approximately 20,000 hours (1.7 percent), and the cost reduction would be \$2,600,000 (9.6 percent).

The estimated total savings resulting from the above changes to the requirements in the proposed rule are approximately 230,000 hours (19.2 percent) and \$9,100,000 (33.7 percent).

Several caveats should be borne in mind in interpreting these cost estimates. A number of costs have been omitted from the estimates. These include costs for Tier 1 notices for waterborne disease outbreaks or other situations determined by the primacy agency to have the potential for serious adverse health impacts as a result of short-term exposure, costs for repeat notices for fecal coliform violations, costs for notices on the availability of unregulated contaminant monitoring results for systems that would not otherwise have to prepare an annual notice, costs for stuffing notices into bills, costs for air time on broadcast media if they refuse to run adequate notices as public service announcements, costs for notices that cannot be included in CCRs or customer bills because the required time frames preclude it, costs for notices associated with the recently promulgated Stage 1 Disinfectants/Disinfection Byproducts

(D/DBP) rule and the Interim Enhanced Surface Water Treatment Rule (IESWTR), and costs to States associated with adopting primacy regulations to implement the new public notification requirements. EPA is continuing to refine its cost estimates and will incorporate as many of these costs as possible into its economic analysis for the final rule.

Most of these costs have been omitted from the analysis for the proposed rule because they are not expected to be large and would not significantly change the bottom line cost and burden estimates. However, the public notification costs associated with violations of the D/DBP rule and the IESWTR may be significant. These rules contain a number of new standards as well as significant new monitoring requirements, and will require a significant capital investment from some systems. Because these two rules have not yet gone into effect, EPA has omitted the cost estimates for the proposed public notification rule. EPA does not currently have any basis on which to project the annual number of violations requiring a public notice. However, EPA recognizes that meeting the public notification requirements for these new rules could raise the costs of the current and proposed public notification rule significantly.

In considering the burden and cost reduction for the proposed rule relative to the current requirements, it is important to keep in mind that this comparison is based on assuming full compliance with both rules. In fact, as documented in the GAO report, there has been widespread non-compliance with the current requirements. EPA expects that by clarifying and streamlining these requirements, the proposed rule will result in a significantly higher level of compliance. To the extent that this occurs, there will also be an increase in State and water system resources devoted to public notification, despite the savings estimated here because of the streamlined rule that is being proposed. On the other hand, for those systems that have been complying with public

notice requirements all along, the proposed rule may result in genuine cost and burden savings.

For more information about the costs of the rule and how EPA developed the estimates, see the Supporting Statement for the EPA Information Collection Request (ICR #1898.01) and the Regulatory Flexibility Screening Analysis that EPA submitted for OMB approval. EPA is requesting comment on its cost estimates and methodology.

### VIII. Other Administrative 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 or entitlement, grants, user fees, or loan programs or the rights and obligations of the recipients thereof; or
- (4) Raise novel legal or policy issues arising out of the legal mandates, the President's priorities, or the principles set forth in the Executive Order.

Pursuant to the terms of Executive Order 12866, it has been determined that this rule is a "significant regulatory action." As such, this action was submitted to OMB for review. Changes made in response to OMB suggestions or recommendations will be documented in the public record.

### B. Regulatory Flexibility Act

Under the Regulatory Flexibility Act (RFA), 5 U.S.C. 601 et seq., as amended by the Small Business Regulatory Enforcement Fairness Act (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.

Pursuant to section 605(b) of the Regulatory Flexibility Act, 5 U.S.C. 605(b), the Administrator certifies that this rule will not have a significant economic impact on a substantial number of small entities.

There are three types of small entities under the RFA:

- A "small business" is any small business concern that is independently owned and operated and not dominant in its field as defined by the Small Business Act (15 U.S.C. 632). Public water systems within this category include privately owned community water systems, mobile home parks, and day care centers.
- A "small organization" is any notfor-profit enterprise that is independently owned and operated and not dominant in its field. Examples of water systems that are small organizations are churches, schools, and homeowners associations.
- A "small governmental jurisdiction" includes cities, counties, towns, school districts or special districts with populations of less than 50,000 (5 U.S.C. 601).

For this analysis, EPA selected systems serving 10,000 or fewer persons as the criterion for small water systems and therefore as the definition of small entity for the purposes of the RFA as amended by SBREFA. This is the cut-off level specified by Congress in the 1996 Amendments to the Safe Drinking Water Act for small system flexibility provisions. Because this definition does not correspond to the definitions of "small" for small businesses, governments, and non-profit organizations previously established under the RFA, EPA requested comment on an alternative definition of "small entity" in the Preamble to the proposed Consumer Confidence Report (CCR) regulation (63 FR 7620, February 13, 1998). Comments showed that stakeholders support the proposed alternative definition. EPA also consulted with the SBA Office of Advocacy on the definition as it relates to small businesses. In the preamble to the final CCR regulation (63 FR 44511, August 19, 1998), EPA stated its intent to establish this alternative definition for regulatory flexibility assessments under the RFA for all drinking water regulations and has thus used it for this public notification rulemaking. Further information supporting this certification is available in the public docket for this rule.

The basis for the Administrator's certification is as follows: the annualized compliance costs of the rule represent less than one percent of annual sales for small businesses and

less than one percent of annual operating revenues for small government entities. The analyses supporting this certification are contained in the "Regulatory Flexibility Screening Analysis" prepared for this proposed rule. Each analysis compared the average estimated per-system compliance costs associated with the proposed regulation with the average estimated per-system revenues or expenditures.

The first analysis, using existing data, categorized systems as small businesses, small governments, and small organizations. Within these categories, EPA subdivided the entity categories into three size range categories: those systems serving 25–500 people; those systems serving 501-3,300 people; and those serving 3,301–10,000 people. The analysis was completed for each of the small entity types and sizes. The existing data included only CWSs and NTNCWSs. TWSs were excluded because no data were available for them on entity type. The resulting ratios ranged from less than 0.01 percent for small organization water systems serving 500 or more persons to 0.20 percent for small government systems serving 25 to 500 persons.

The second analysis categorized systems by system type (i.e., CWS, NTNCWS, and TWS), using the same three size categories as the first analysis. The resulting ratios ranged from less than 0.01 percent for non-transient non-community water systems serving less than 500 persons to 0.36 percent for transient non-community water systems serving 3,301–10,000 persons.

All system types and system size categories are well below a 1 percent impact on average. This methodology obscures to some extent the potential for impact on individual systems. For example, the average revenue for a CWS in the 25-500 size range is estimated at \$93,743 while the average compliance cost is estimated at \$183, or 0.20 percent of average revenue. Many systems in this size range have lower revenues, however, and if they had several violations in one year could have higher compliance costs. Thus, many individual systems may experience compliance costs higher than 0.20 percent of revenue.

Even so, EPA believes these potential costs are unlikely to represent a significant adverse economic impact for more than a handful of systems. The proposed rule would reduce the costs of implementation currently required for all public water systems under the existing public notification rule, even though (as discussed in Part VII) as a practical matter the actual costs

incurred will likely increase for water systems not complying with the current public notification regulations.

Since the Administrator is certifying this rule, the Agency did not prepare an RFA. Nevertheless, the Agency has conducted outreach to address the small-entity impacts that do exist and to gather information. The Agency also has structured the rule to avoid significant impacts on a substantial number of small entities by providing flexibility to public water systems on the method of delivery of the public notice and by offering all public water systems the opportunity to use an annual report of violations in lieu of individual Tier 3 notices. In addition, all community water systems are encouraged to use the CCR to meet the requirements of the public notice rule wherever appropriate. (Note that to use the CCR, many small systems would have to distribute their CCR more widely to meet the public notification distribution requirements.) Finally, small community water systems and all non-community water systems may hand deliver or post the notice in lieu of mailing, reducing substantially their overall cost of compliance with this rule.

### C. Paperwork Reduction Act

The information collection requirements in this proposed rule have been submitted for approval to the Office of Management and Budget (OMB) under the Paperwork Reduction Act, 44 U.S.C. 3501 et seq. An Information Collection Request (ICR) document has been prepared by EPA (ICR No. 1898.01) and a copy may be obtained from Sandy Farmer, OP Regulatory Information Division, U.S. **Environmental Protection Agency** (2137), 401 M Street SW, Washington, DC 20460, by E-mail at farmer.sandy@epa.gov, or by calling (202) 260–2740. The supporting statement for the ICR is available for review from the EPA Docket for this rule, titled: "Supporting Statement for **EPA Information Collection Request** Number #1898.01, Public Water System Supervision Program Public Notification Requirements." A copy may also be downloaded off the Internet at http:// www.epa.gov/icr. The information requirements are not effective until OMB approves them.

This information is being collected in order to fulfill the statutory requirements of section 114(c)(4) of the Safe Drinking Water Act Amendments (SDWA) of 1996 (Public Law 104-182) enacted August 6, 1996. Public notice of violations is an integral part of a number of public health protection and consumer right-to-know provisions of

the 1996 SDWA amendments. The public notification requirement is one of six interrelated provisions now included in the SDWA related to providing information to the public. Responses are mandatory. None of the information submitted under the proposed rule is confidential business information.

The burden to public water systems is based on the cost of the rule discussed under Section VII of the Preamble. Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal Agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing way to comply with any previous applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

The total annual burden to both public water systems and primacy agencies is 972,107 hours at an annual cost of \$17,956,117. The cost estimate includes both the labor hour costs and the O&M costs of implementing the rule.

The annual burden to public water systems of meeting the requirements of the revised public notification rule is 910,987 hours at an annual cost of \$16,391,263. The burden estimate is the sum of the costs of three component activities: notice preparation costs; notice distribution costs; and costs of repeat notices. The costs to the public water systems include labor and nonlabor costs, such as the costs of postage to mail the public notices where required. Public water systems are required to comply with the public notification rule if they have one or more violations of National Primary Drinking Water Regulations (NPDWR) or have other situations requiring a public notice. The number of public water systems estimated to have violations on an annual basis is 46,572. The annual average burden per public water system violating one or more drinking water standards is \$351.96 and 19.6 hours.

The annual burden to primacy agencies of implementing the new public notification regulations is 61,120 hours at an annual cost of \$1,564,854. The burden estimate is also the sum of three component activities: costs of consulting with public water systems;

costs of receiving and reviewing the compliance certification and notice copies received from the public water system; and the costs of filing and maintaining the public water system notification records. The costs to the primacy agency include labor costs only. Primacy agencies are required to adopt and implement the new public notification regulation as a condition of maintaining primacy. (Note that the burden to the state for adopting the regulation has not been included in the draft ICR but will be included in the ICR for the final rule.) Fifty-six States and Territories currently have primacy under the Safe Drinking Water Act. EPA directly implements the regulatory program in Wyoming, Washington, D.C., and the Indian Lands. The average annual burden for each of the 56 States and Territories with primacy to implement the proposed public notification rule is \$27,944 and 1,091 hours per primacy agency.

The paperwork burden associated with the existing public notification requirements in 40 CFR 141.32 is currently included in the baseline drinking water ICR (OMB Control No. 2040–0090, EPA ICR #270.39). The estimated burden under ICR #270.39 is 955,191 hours, and \$21,969,393. This is the estimated cost to public water systems only, as the approved ICR did not include any incremental costs to the

primacy agencies.

To estimate the change in the burden under the proposed rule to public water systems, EPA re-calculated the burden numbers under the current rule to provide a common basis to compare the existing rule with the proposed rule. The existing ICR estimate could not be used as the basis of comparison because it used different lower external cost and workload assumptions.

The adjusted burden of the current rule was calculated to be approximately 1,200,000 hours and the adjusted cost was calculated at approximately \$27,000,000. The burden reduction, therefore, under the proposed rule would be approximately 230,000 hours (or 19.2 percent) and the cost reduction approximately \$9,100,000 (or 33.7) percent). Two programmatic changes associated with the proposed rule account for the bulk of the reduction in burden and cost estimates from the current rule.

• The proposed rule changes both the timing and method of delivery options for Tier 3 violations. The proposed rule would require notice within one year after the occurrence of the violation rather than within three months, as required by the current rule. Systems with monitoring and testing procedure

violations occurring several times throughout the year are able under the proposed rule to consolidate their notices into one annual notice. The proposed rule would also allow community water systems to meet the public notice requirements for Tier 3 through the existing Consumer Confidence Report (CCR). Tier 3 violations are primarily monitoring or testing procedure violations. EPA estimates that half of all community water systems serving less than 10,000 and all community systems serving more than 10,000 will use the CCR for Tier 3 notices. The estimated burden reduction for the proposed changes to the timing and method of delivery for Tier 3 notices is approximately 210,000 hours (17.5 percent) and the cost reduction is approximately \$6,500,000 (24.1 percent).

 The proposed rule changes the required methods of delivery for Tiers 1 and 2 notices. The current rule requires both newspaper and mail delivery for all tiers. Those systems for whom no newspaper outlet is available are allowed to hand deliver or post instead of mailing and using the newspaper. Under the current rule, systems with Tier 1 violations must also issue a notice via television or radio. The proposed rule requires only one method of delivery for Tier 2-mail or hand delivery (or posting for non-community systems). The burden reduction for resulting from the change in the Tier 1 and Tier 2 method of delivery requirements in the proposed rule would be approximately 20,000 hours (1.7 percent), and the cost reduction would be \$2,600,000 (9.6 percent).

Section VII of the preamble presents more detailed information on the cost of the rule. Section VII also discusses several caveats that should be borne in mind when considering these cost and burden estimates.

An Agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations are listed in 40 CFR Part 9 and 48 CFR Chapter 15.

Comments are requested on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques. Send comments on the ICR to the Director, OP Regulatory Information Division, U.S. Environmental Protection Agency (2137), 401 M Street SW, Washington, D.C. 20460; and to the Office of

Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street NW, Washington, D.C. 20503, marked "Attention: Desk Officer for EPA." Include ICR number 1898.01 in any correspondence. Since OMB is required to make a decision concerning the ICR between 30 and 60 days after May 13, 1999, a comment to OMB is best assured of having its full effect if OMB receives it by June 14, 1999. The final rule will respond to any OMB or public comments on the information collection requirements contained in this proposal.

### D. Executive Order 12875: Enhancing Intergovernmental Partnerships

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, any written communications from the governments, and a statement supporting the need to issue the regulation. 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.

EPA has concluded that this rule will create a mandate on State, local and Tribal governments that own or operate PWSs, and that the Federal government will not provide the funds necessary to pay the direct costs incurred by the State, local and Tribal governments in complying with the mandate. In developing this rule, EPA consulted with State, local and Tribal governments to enable them to provide meaningful and timely input in the development of this rule. As described in section III of the Supplementary Information above, EPA held a series of stakeholder meetings with a wide variety of State, local, and Tribal representatives, who provided meaningful and timely input in the development of the proposed rule. The principal concerns raised by the State, local, and Tribal governments were the potential drain on their resources and the potential complexity

of the Federal rule, which would make it difficult to implement effectively. EPA believes it has addressed these concerns in the proposed regulation, which provides considerable flexibility in how the public notice is developed and what delivery mechanisms are available. The costs of the proposed regulation are less than those required for full compliance with the existing public notification rule. Summaries of the meetings have been included in the public docket for this rulemaking.

#### E. 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 EPA 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 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.

Today's proposed rule does not significantly or uniquely affect the communities of Indian Tribal governments, nor does it impose substantial direct compliance costs on such communities. Further, the impact on Tribal governments is not unique in that this rule applies equally to all public water systems, including those owned and operated by Federal, State, and local governments. Public water systems on Indian lands incur costs under the public notification rule only if they violate a national primary drinking water regulation or have a variance or exemption from EPA. The public notification requirements will in most cases be met either through hand delivery of a single notice to all persons served or by posting the notice in conspicuous locations. Costs of meeting these requirements will be minimal. In

fact, the public notification costs resulting from this rule are less than those required for full compliance with the existing regulation. Accordingly, the requirements of section 3(b) of Executive Order 13084 do not apply to this proposed rule.

### F. Unfunded Mandates Reform Act

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Public Law 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 any 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. 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.

EPA has determined that this rule would not contain a Federal mandate that may result in expenditures of \$100 million or more for State, local, and Tribal governments, in the aggregate, or the private sector in any one year. The estimated cost of the proposed rule is \$34,771,019. (See section VII of the Supplementary Information.) Thus, today's rule is not subject to the requirements of sections 202 and 205 of

the UMRA. This rule will establish requirements that affect small community water systems. However, EPA has determined that this rule contains no regulatory requirements that might significantly or uniquely affect small governments because the regulation requires minimal expenditure of resources. In fact, the public notification costs resulting from this rule are less than those required for full compliance with the existing regulation. Thus, today's rule is not subject to the requirements of section 203 of UMRA.

#### G. Environmental Justice

Pursuant to Executive Order 12898 (59 FR 7629, February 16, 1994), the Agency has considered environmental justice related issues with regard to the potential impacts of this action on the environmental and health conditions in low-income and minority communities. The Agency believes that several of today's proposed requirements will be particularly beneficial to these communities:

- Public water systems would be required to distribute the notice to all persons served, both through the use of required delivery methods and through the use of additional measures reasonably calculated to reach other persons served, if they would not normally be reached by the required method. In addition, the notice to bill-paying customers must include standard language encouraging those receiving the public notice to make the notice available to other consumers who are not bill paying customers (e.g., renters, transients, students).
- Public notices would include information on what the consumers should do to minimize the health risk from drinking water in violation of EPA standards and on when to seek further medical advice. All notices would be required to include the name and phone number of the water system official who can provide further information.
- Public water systems would include information on the importance of the notice in a language other than English if a large proportion of the population does not speak English (as determined by the primacy agency).

### H. Risk to Children Analysis

Executive Order 13045, "Protection of Children from Environmental Health Risks and Safety Risks" (62 FR 19885, April 23, 1997), 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 affect 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.

The proposed rule is not subject to the Executive Order because it is not economically significant as defined in E.O. 12866. The purpose of the proposed rule is to provide a public notice to all persons served when a violation of EPA drinking water standards occurs, to enable consumers to avoid health and safety risks from potential exposure to harmful contaminants in the drinking water. The regulation addresses the particular risks that certain contaminants may pose by considering such risks in assigning contaminants to the appropriate tier and by identifying such risks in the required health effects language, with specific reference to risks to children, where appropriate. The public notice requirements, however, apply to potential health and safety risks to all consumers and all vulnerable populations, and are not targeted specifically to address a disproportionate risk to children.

### I. National Technology Transfer and Advancement Act

Under section 12(d) of the National Technology Transfer and Advancement Act of 1995 (NTTAA), 15 U.S.C. 272, 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., materials specifications, test methods, sampling procedures, business practices, etc.) that are developed or adopted by voluntary consensus standards bodies. Where available and potentially applicable voluntary consensus standards are not used by EPA, the Act requires the Agency to provide Congress, through the Office of Management and Budget, an explanation of the reasons for not using such standards. The Agency does not believe that this proposed rule addresses any technical standards subject to the NTTAA. A commenter who disagrees with this conclusion should indicate how the rule is subject to the Act and identify any potentially applicable voluntary consensus standards.

#### List of Subjects

#### 40 CFR Part 141

Environmental protection, Chemicals, Indians—lands, Intergovernmental relations, Radiation protection, Reporting and recordkeeping requirements, Water supply.

#### 40 CFR Part 142

Environmental protection, Administrative practice and procedure, Chemicals, Indians—lands, Radiation protection, Reporting and recordkeeping requirements, Water supply.

#### 40 CFR Part 143

Chemicals, Indians-lands, Water supply.

Dated: April 27, 1999.

#### Carol M. Browner,

Administrator.

For the reasons set out in the preamble, the Environmental Protection Agency proposes to amend 40 CFR parts 141, 142, and 143 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, 300 g–3, 300g–4, 300 g–5, 300 g–6, 300 j–4, 300 j–9, and 300 j–11.

2. In part 141, the heading for subpart D is revised to read as follows:

### Subpart D—Reporting and Record Keeping

3. Section 141.31 is amended by revising paragraph (d), to read as follows:

### § 141.31 Reporting requirements.

\* \* \* \* \*

- (d) The public water system, within 10 days of completion of each public notice required pursuant to subpart Q of this part, must submit to the primacy agency a certification that all public notification requirements have been met and must include with this certification a representative copy of each type of notice distributed, published, posted, and made available to the persons served by the system and to the media.
- 4. Section 141.32 is amended by revising the introductory paragraph, to read as follows:

#### §141.32 Public notification.

The requirements in this section apply until the requirements of Subpart Q of this part become effective. For public water systems where EPA directly implements the public water

system supervision program, the requirements in Subpart Q of this part will become effective on [date 90 days after publication of the final rule in the **Federal Register**]. For all other public water systems, the requirements in Subpart Q of this part will become effective on [date two years after publication of the final rule in the **Federal Register**] or the date the Stateadopted rule becomes effective, whichever comes first.

5. Section 141.33 is amended by adding paragraph (e), to read as follows:

### §141.33 Record maintenance.

\* \* \* \* \*

\*

(e) Copies of public notices issued pursuant to subpart Q of this part and certifications made to the primacy agency pursuant to § 141.31 must be kept for three years after issuance.

### §141.35 [Amended]

6. Section 141.35 is amended by removing paragraph (d).

7. Part 141 is amended by adding subpart Q, to read as follows:

### Subpart Q—Public Notification of Drinking Water Violations

Sec.

- 141.201 General public notification requirements.
- 141.202 *Tier 1 Public Notice*—Form, manner, and frequency of notice.
- 141.203 *Tier 2 Public Notice*—Form, manner, and frequency of notice.
- 141.204 *Tier 3 Public Notice*—Form, manner, and frequency of notice.
- 141.205 Content of the public notice.
- 141.206 Notice to new billing units or new customers.
- 141.207 Special notice of the availability of unregulated contaminant monitoring results.
- 141.208 Special notice for exceedance of the SMCL for fluoride.
- 141.209 Notice by primacy agency on behalf of the public water system.
- Appendix A to Subpart Q of Part 141— NPDWR Violations and Situations Requiring Public Notice
- Appendix B to Subpart Q of Part 141— Standard Health Effects Language for Public Notification
- Appendix C to Subpart Q of Part 141—List of Acronyms Used in Public Notification Regulation

### Subpart Q—Public Notification of Drinking Water Violations

### § 141.201 General public notification requirements.

The requirements in this subpart are effective no later than [date two years after publication of the final rule in the **Federal Register**] or on the date the State-adopted rule becomes effective, whichever comes first. For public water systems where EPA directly implements

the public water system supervision (PWSS) program (i.e., Indian lands, Wyoming, Washington, D.C.), the requirements in this section are effective 90 days after publication of the final rule in the **Federal Register**.

(a) Who must give public notice? Each owner or operator of a public water system (community water systems, non-transient non-community water systems, and transient non-community water systems) must give notice for all violations of national primary drinking water regulations (NPDWR) and for other situations, as listed in Table 1 of this section. Appendix A to this subpart identifies the tier assignment for each specific violation or situation.

# TABLE 1 TO §141.201.—VIOLATION CATEGORIES AND OTHER SITUATIONS REQUIRING A PUBLIC NOTICE

- NPDWR violations (MCL, MRDL, treatment technique, monitoring and testing procedure)
- (i) Failure to comply with an applicable maximum contaminant level (MCL) or maximum residual disinfectant level (MRDL).
- (ii) Failure to comply with a prescribed treatment technique (TT).
- (iii) Failure to perform water quality monitoring, as required by the regulations.
- (iv) Failure to comply with testing procedures as prescribed by a drinking water regulation.
- (2) Variance and exemptions under sections 1415 and 1416 of SDWA
- (i) Operation under a variance or an exemption.
- (ii) Failure to comply with the requirements of any schedule that has been set under a variance or exemption.
  - (3) Special public notices
- (i) Occurrence of a waterborne disease outbreak. Exceedance of the secondary maximum contaminant level (SMCL) for fluoride. Availability of unregulated contaminant monitoring data. Other situations determined by the primacy agency to have a potential for serious adverse effects on human health.
- (b) What type of public notice is required for each violation or situation? Public notice requirements are divided into three tiers, to take into account the seriousness of the violation or situation and of any potential adverse health effects that may be involved. The public notice requirements for each violation or situation listed in Table 1 of this section are determined by the tier to which it is assigned. Table 2 of this section provides the definition of each tier. Appendix A to this subpart identifies the tier assignment for each specific violation or situation.

### TABLE 2 TO § 141.201—DEFINITION OF PUBLIC NOTICE TIERS

- (1) Tier 1 public notice—required for NPDWR violations and situations with significant potential to have serious adverse effects on human health as a result of short-term exposure.
- (2) Tier 2 public notice—required for all other NPDWR violations and situations with potential to have serious adverse effects on human health.
- (3) Tier 3 public notice—required for all other NPDWR violations and situations not included in Tier 1 and Tier 2.
- (c) Who must be notified? Each public water system must provide public notice to persons served by the water system, in accordance with this subpart. A copy of the notice must also be sent to the primacy agency, in accordance with the requirements under § 141.31(d).

### § 141.202 Tier 1 Public Notice—Form, manner, and frequency of notice.

(a) Which violations or situations require a Tier 1 public notice? Table 1 of this section lists the violation categories and other situations requiring a Tier 1 public notice. Appendix A to this subpart identifies the tier assignment for each specific violation or situation.

# TABLE 1 TO §141.202.—VIOLATION CATEGORIES AND OTHER SITUATIONS REQUIRING A TIER 1 PUBLIC NOTICE

- (1) Violation of the MCL for total coliforms, when fecal coliform or *E. coli* are present in the water distribution system (as specified in §141.63(b)), or failure to test for fecal coliforms or *E. coli* after the presence of coliform bacteria in the water distribution system is confirmed (as specified in §141.21(e));
- (2) Violation of the MCL for nitrate, nitrite, or combined nitrate+nitrite, as defined in §141.62;
- (3) Violation of the MRDL for chlorine dioxide, when one or more repeat samples taken in the distribution system exceed the MRDL, or when required repeat samples are not taken in the distribution system, as defined in § 141.65(a);
- (4) Occurrence of a waterborne disease outbreak, as defined in § 141.2; and
- (5) Other violations or situations with potential to have serious adverse effects on human health as a result of short-term exposure, as determined by the primacy agency either in its regulations or on a case-by-case basis.

(b) When is the Tier 1 public notice to be provided? What additional steps are required?

Public water systems must:

- (1) Provide a public notice as soon as practicable but no later than 24 hours after the system learns of the violation;
- (2) Initiate consultation with the primacy agency as soon as practicable, but no later than 24 hours after the public water system learns of the violation or situation, to determine additional public notice requirements; and
- (3) Comply with any additional public notification requirements (including any repeat notices) that are established as a result of the consultation with the primacy agency. Such requirements may include the timing, form, manner, frequency, and content of repeat notices (if any) and other actions designed to reach all persons served.
- (c) What is the form and manner of the public notice? Public water systems must provide the notice in a form and manner reasonably calculated to reach all persons served within 24-hours. The form and manner used by the public water system are to fit the specific situation, but must be designed to reach residential, transient, and non-transient users of the water system. In order to reach all persons served, water systems are to use, at a minimum, one or more of the following forms of delivery:
- (1) Appropriate broadcast media (such as radio and television);
- (2) Posting of the notice in conspicuous locations; or
- (3) Hand delivery of the notice to persons served by the water system.

### §141.203 Tier 2 Public Notice—Form, manner, and frequency of notice.

(a) Which violations or situations require a Tier 2 public notice? Table 1 of this section lists the violation categories and other situations requiring a Tier 2 public notice. Appendix A to this subpart identifies the tier assignment for each specific violation or situation.

# TABLE 1 TO §141.203.—VIOLATION CATEGORIES AND OTHER SITUATIONS REQUIRING A TIER 2 PUBLIC NOTICE

- All violations of the MCL, MRDL, and treatment technique requirements not included in the Tier 1 notice category;
- (2) Violations of the monitoring and testing procedure requirements, where the primacy agency determines that a Tier 2 rather than a Tier 3 public notice is required, taking into account potential health impacts and persistence of the violation; and

- TABLE 1 TO §141.203.—VIOLATION CATEGORIES AND OTHER SITUATIONS REQUIRING A TIER 2 PUBLIC NOTICE—Continued
- (3) Failure to comply with the terms and conditions of any variance or exemption in place.
- (b) When is the Tier 2 public notice to be provided? Public water systems must provide the public notice as soon as practicable, but no later than 30 days after the system learns of the violation. The primacy agency may allow additional time in specific circumstances of up to three months from the date the system learns of the violation. The public water system must repeat the notice every three months, unless the primacy agency determines that specific circumstances warrant a different repeat notice frequency. In no circumstance will the repeat notice be less frequent than once per year. If the public notice is posted, the notice must remain in place for as long as the violation or situation exists.
- (c) What is the form and manner of the Tier 2 public notice? Public water systems must provide the notice in a form and manner that is reasonably calculated to reach persons served in the required time period. The form and manner of the public notice may vary based on the specific situation and type of water system, but it must at a minimum meet the following requirements:

(1) Unless directed otherwise by the primacy agency, community water systems must provide notice by:

(i) Mail or other direct delivery to each customer receiving a bill or other service connections; and

- (ii) Any other method reasonably calculated to reach other persons regularly served by the system, if they would not normally be reached by the notice required in paragraph (c)(1)(i) of this section. Such methods may include: publication in a local newspaper; delivery of multiple copies for distribution by single-biller customers (e.g., apartment buildings or large private employers); posting in public places or on the Internet; or delivery to community organizations.
- (2) Unless directed otherwise by the primacy agency, non-community water systems must provide notice by:
- (i) Posting the notice in conspicuous locations frequented by persons served by the system, or by mail or direct delivery to each customer (where known); and
- (ii) Any other method reasonably calculated to reach other persons served by the system if they would not

normally be reached by the notice required in paragraph (c)(2)(i) of this section. Such methods may include: publication in a local newspaper or newsletter distributed to customers; use of E-mail to notify employees or students; or, delivery of multiple copies in central locations (e.g., community centers).

### § 141.204 Tier 3 Public Notice—Form, manner, and frequency of notice.

(a) Which violations or situations require a Tier 3 public notice? Table 1 of this section lists the violation categories and other situations requiring a Tier 3 public notice. Appendix A to this subpart identifies the tier assignment for each specific violation or situation.

# TABLE 1 TO § 141.204.—VIOLATION CATEGORIES AND OTHER SITUATIONS REQUIRING A TIER 3 PUBLIC NOTICE

- (1) Monitoring violations under 40 CFR part 141, unless the primacy agency determines that the violation requires a Tier 2 notice:
- (2) Failure to comply with a testing procedure established in 40 CFR part 141;
- (3) Operation under a variance granted under section 1415 or exemption granted under section 1416 of the Act; and
- (4) Any other violations and situations determined by the primacy agency to require a Tier 3 public notice.
- (b) When is the Tier 3 public notice to be provided? (1) Public water systems must provide the public notice not later than one year after the public water system learns of the violation or begins operating under a variance or exemption. Following the initial notice, the public water system must repeat the notice annually for as long as the violation, variance, exemption, or other situation exists. If the public notice is posted, the notice must remain in place for as long as the violation, variance, exemption, or other situation exists.
- (2) Instead of individual public notices, a public water system may use an annual report summarizing all violations occurring during the previous twelve months to meet the requirements of paragraph (b)(1) of this section.
- (c) What is the form and manner of the Tier 3 public notice? Public water systems must provide the notice in a form and manner that is reasonably calculated to reach all persons served in the required time period. The form and manner of the public notice may vary based on the specific situation and type of water system, but it must at a

- minimum meet the following requirements:
- (1) Unless directed otherwise by the primacy agency, community water systems must provide notice by:
- (i) Mail or other direct delivery to each customer receiving a bill or other service connections; and
- (ii) Any other method reasonably calculated to reach other persons regularly served by the system, if they would not normally be reached by the notice required in paragraph (c)(1)(i) of this section. Such methods may include: publication in a local newspaper; delivery of multiple copies for distribution by single-biller customers (e.g., apartment buildings or large private employers); posting in public places or on the Internet; or delivery to community organizations.
- (2) Unless directed otherwise by the primacy agency, non-community water systems must provide notice by:
- (i) Posting the notice in conspicuous locations frequented by persons served by the system, or by mail or direct delivery to each customer (where known); and
- (ii) Any other method reasonably calculated to reach other persons served by the system, if they would not normally be reached by the notice required in paragraph (c)(2)(i) of this section. Such methods may include: publication in a local newspaper or newsletter distributed to customers; use of E-mail to notify employees or students; or, delivery of multiple copies in central locations (e.g., community centers).
- (d) In what situations may the Consumer Confidence Report be used to meet the Tier 3 public notice requirements? For community water systems, the Consumer Confidence Report (CCR) required under subpart O of this part may be used as a vehicle for the initial Tier 3 public notice and all required repeat notices, as long as the CCR is provided to all persons served no later than 12 months after the system learns of the violation and as long as the CCR follows the form, manner, and content requirements of this section.

### §141.205 Content of the public notice.

- (a) What elements must be included in the public notice for violations of National Primary Drinking Water Regulations (NPDWR), including the monitoring and testing procedure requirements? When a public water system violates an NPDWR, each public notice must include the following elements:
- (1) A description of the violation, including the contaminant of concern,

- and (as applicable) the contaminant level ;
  - (2) When the violation occurred;
- (3) Any potential adverse health effects from the violation, including the standard language under paragraph (d)(1) or (d)(2) of this section, whichever is applicable;
- (4) The population at risk, including subpopulations particularly vulnerable if exposed to the contaminant in their drinking water;
- (5) Whether alternative water supplies should be used;
- (6) What actions consumers should take, including when they should seek medical help, if known;
- (7) What the system is doing to correct the violation;
- (8) When the water system expects to return to compliance;
- (9) The phone number of the water system owner, operator, or designee of the public water system as a source of additional information concerning the notice; and
- (10) A statement to encourage the notice recipient to distribute the public notice to other persons served, using the standard language under paragraph (d)(3) of this section.
- (b) What elements must be included in the public notice for public water systems operating under a variance or exemption? (1) If a public water system has been granted a variance or an exemption, the public notice must contain:
- (i) An explanation of the reasons for the variance or exemption;
- (ii) The date on which the variance or exemption was issued;
- (iii) A brief status report on the steps the system is taking to install treatment, find alternative sources of water, or otherwise comply with the terms and schedules of the variance or exemption;
- (iv) A notice of any opportunity for public input in the review of the variance or exemption.
- (2) If a public water system violates the conditions of a variance or exemption, the public notice must contain the ten elements listed in paragraph (a) of this section.
- (c) How is the public notice to be presented? (1) Each public notice required by this section:
- (i) Must be displayed in a conspicuous way (where applicable);
- (ii) Must not contain overly technical language or very small print;
- (iii) Must not be formatted in a way that defeats the purpose of the notice;
- (iv) Must not contain language which nullifies the purpose of the notice.
- (2) For public water systems serving a large proportion of non-English

speaking consumers, as determined by the primacy agency, the public notice must contain information in the appropriate language(s) regarding the importance of the notice or contain a telephone number or address where persons served may contact the water system to obtain a translated copy of the notice or to request assistance in the appropriate language.

(d) What standard language must public water systems include in their public notice? Public water systems are required to include the following standard language in their public notice:

- (1) Standard health effects language for MCL or MRDL violations, treatment technique violations, and violations of the condition of a variance or exemption. Public water systems must include in each public notice the health effects language specified in Appendix B to this subpart corresponding to each MCL, MRDL, and treatment technique violation listed in Appendix A to this subpart, and for each violation of a condition of a variance or exemption.
- (2) Standard language for monitoring and testing procedure violations. Public water systems must include the following language in their notice for all monitoring and testing procedure violations listed in Appendix A to this subpart:

Because we ['did not monitor or test'' or "failed to monitor or test completely''] during [compliance period], we do not know whether the contaminant was present in your drinking water during that time period, and we are unable to tell whether your health was at risk during that time.

(3) Standard language to encourage the distribution of the public notice to all persons served. Public water systems must include in or attach to their notice the following language:

If other people receive water from you, such as tenants, residents, patients, students, or employees, it is important that you provide this notice to them by posting it in a conspicuous location or by direct hand or mail delivery.

### § 141.206 Notice to new billing units or new customers.

(a) What is the requirement for community water systems? Community

water systems must give a copy of the most recent public notice for any continuing violation or the existence of a variance or exemption to all new billing units or new hookups prior to or at the time service begins.

(b) What is the requirement for non-community water systems? Non-community water systems must continuously post the public notice in a conspicuous place in order to inform new consumers of any continuing violation, variance, or exemption for as long as the violation exists.

# § 141.207 Special notice of the availability of unregulated contaminant monitoring results.

- (a) When is the special notice to be given? The owner or operator of a community water system or non-transient, non-community water system required to monitor under § 141.40 must notify persons served by the system of the availability of the results of such sampling no later than 12 months after the monitoring results are known.
- (b) What is the form and manner of the special notice? The form and manner of the public notice must follow the requirements for a Tier 3 public notice prescribed in §§ 141.204(c) and (d). The notice must also identify a person and provide the telephone number to contact for information on the monitoring results.

### § 141.208 Special notice for exceedance of the SMCL for fluoride.

- (a) When is the special notice to be given? Community water systems that exceed the secondary maximum contaminant level (SMCL) for fluoride as determined by the last single sample taken in accordance with § 141.23, but do not exceed the maximum contaminant level for fluoride as specified in § 141.62, must provide the public notice in paragraph (c) of this section to all persons served. Public notice must be provided as soon as practicable but no later than 12 months from the day the water system learns of the exceedance.
- (b) What is the form and manner of the special notice? The form and manner of the public notice (including

- repeat notices) must follow the requirements for a Tier 3 public notice in §§ 141.204(c) and (d).
- (c) What mandatory language must be contained in the special notice? The notice must contain the following language, including the language necessary to fill in the blanks:

The drinking water provided by [name of community water system] has a fluoride concentration of [insert value] milligrams per liter (mg/l). Although your drinking water does not violate the drinking water standard of 4 mg/l for fluoride, the U.S. Environmental Protection Agency requires us to notify you when we discover that the fluoride levels in your drinking water exceed 2 mg/l. This is to alert you about a cosmetic dental problem that might affect children under nine years old.

Fluoride at lower levels helps prevent cavities. However, children drinking water containing fluoride at the levels present in your drinking water may develop dental fluorosis. Dental fluorosis, in its moderate or severe forms, may result in a brown staining and/or pitting of the permanent teeth. This problem occurs only in developing teeth, before they erupt from the gums.

Children under nine should be provided with alternative sources of drinking water to avoid the possibility of staining and pitting of their permanent teeth. Older children and adults may safely drink the water.

For more information and to learn about available water treatment systems, please call [name of water system contact] of [name of community water system] at [phone number].

### §141.209 Notice by primacy agency on behalf of the public water system.

- (a) When may the primacy agency give the notice on behalf of the public water system? The primacy agency may give the notice required by this subpart on behalf of the owner and operator of the public water system if the primacy agency complies with the requirements of this subpart.
- (b) What is the responsibility of the public water system when notice is given by the primacy agency? The owner or operator of the public water system remains legally responsible for ensuring that the requirements of this subpart are met.

## APPENDIX A TO SUBPART Q OF PART 141.—NPDWR VIOLATIONS AND OTHER SITUATIONS REQUIRING PUBLIC NOTICE<sup>1</sup> (INCLUDING D/DBP AND IESWTR VIOLATIONS)

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	MCL/MF	RDL/TT violations <sup>2</sup>		and testing procedure violations
Contaminant	Tier of pub- lic notice required	Citation	Tier of pub- lic notice required	Citation
I. Violations of National Primar Microbiol	y Drinking Wa ogical Contam		/R): <sup>3</sup>	
Total caliform	2	141 62(0)	3	141 21(a, d)
Total coliform		141.63(a) 141.63(b)		141.21(a-d) 141.21(e)
Fecal coliform/E. coli	1		1	
Turbidity	2	141.13, 141.71(c)	3	141.22
Surface Water Treatment Rule violations	2	141.70–141.73	3	141.74
nterim Enhanced Surface Water Treatment Rule violations	2	141.170–141.173 4	3	141.172, 141.174
	Inorganics			
antimony	2	141.62(b)	3	141.23(a, c)
Arsenic	2	141.11(b), 141.23(n)	3	141.23(a, l, m)
Asbestos (fibers >10 μm)	2	141.62(b)	3	141.23(a-b)
Barium	2	141.62(b)	3	141.23(a, c)
Beryllium	2	141.62(b)	3	141.23(a, c)
Padmium	2	141.62(b)	3	141.23(a, c)
Chromium (total)	2	141.62(b)	3	141.23(a, c)
Cyanide	2	141.62(b)	3	141.23(a, c)
Fluoride	2	141.62(b)	3	141.23(a, c)
Mercury (inorganic)	2	141.62(b)	3	141.23(a, c)
Vitrate	1	141.62(b)	3	141.23(a, d),
villate	'	141.02(b)	3	141.23(a, u), 141.23(f)(2)
litrite	1	141.62(b)	3	141.23(a, e),
				141.23(f)(2)
Diameter , N Diamiter				141.23(a)
NITrate+INITrite	1	141.62(b)	3	171.23(α)
	1 2	141.62(b) 141.62(b)	3 3	141.23(a, c)
Selenium		` ,		
Selenium	2 2	141.62(b) 141.62(b)	3 3	141.23(a, c)
Nitrate+Nitrite Selenium Thallium  Lead and Copper Rule (Action Leve	2 2	141.62(b) 141.62(b)	3 3	141.23(a, c)
Selenium  Thallium  Lead and Copper Rule (Action Leve  Lead and Copper Rule (Action Leve	2 2 I for lead is 0.0	141.62(b)	3 3 1.3 mg/L)	141.23(a, c) 141.23(a, c)
Lead and Copper Rule (Action Leve  Lead and Copper Rule (Synthetic Org	2 2 1 for lead is 0.0	141.62(b)	3 3 1.3 mg/L)	141.23(a, c) 141.23(a, c)
Lead and Copper Rule (Action Leve  Lead and Copper Rule Synthetic Org	2 2 2 I for lead is 0.0 2 ganic Chemica	141.62(b) 141.62(b) 015 mg/L, for copper is 141.80–141.85	3 3 1.3 mg/L)	141.23(a, c) 141.23(a, c) 141.86–141.89
Lead and Copper Rule (Action Leve  Lead and Copper Rule Synthetic Org  2,4-D  2,4,5-TP (Silvex)	2 2 2 I for lead is 0.0 2 2 ganic Chemica 2	141.62(b)	3 3 1.3 mg/L)	141.23(a, c) 141.23(a, c) 141.86–141.89
Lead and Copper Rule (Action Leve  Lead and Copper Rule (Synthetic Orgo, 2,4-D  2,4,5-TP (Silvex)	2 2 2 I for lead is 0.0 2 2 ganic Chemica 2 2 2	141.62(b)	3 3 1.3 mg/L) 3	141.23(a, c) 141.23(a, c) 141.86–141.89 141.24(h) 141.24(h)
Lead and Copper Rule (Action Leve ead and Copper Rule (Synthetic Organical Copper Rule Synthetic Organical Copper Rule (Action Leve Ead and Copper Rule Ead	2 2 2 I for lead is 0.0 2 2 2 2 2 2	141.62(b)	3 3 1.3 mg/L) 3 3 3 3	141.23(a, c) 141.23(a, c) 141.86–141.89 141.24(h) 141.24(h) 141.24(h)
Lead and Copper Rule (Action Leve ead and Copper Rule Synthetic Organic A,4-D	2 2 2 2 2 2 2 2 2 2 2 2	141.62(b)	3 3 1.3 mg/L) 3 3 3 3 3 3	141.23(a, c) 141.23(a, c) 141.86–141.89 141.24(h) 141.24(h) 141.24(h) 141.24(h)
Lead and Copper Rule (Action Leve ead and Copper Rule)  Synthetic Org  4,4-D	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	141.62(b)	3 3 1.3 mg/L) 3 3 3 3 3 3 3 3 3 3	141.23(a, c) 141.23(a, c) 141.86–141.89 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h)
Lead and Copper Rule (Action Leve ead and Copper Rule)  Synthetic Org  4-D  4,5-TP (Silvex)  Alachlor  Atrazine  Benzo(a)pyrene (PAHs)  Carbofuran  Chlordane  Dalapon	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	141.62(b)	3 3 1.3 mg/L) 3 3 3 3 3 3 3 3 3 3 3 3	141.23(a, c) 141.23(a, c) 141.86–141.89 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h)
Lead and Copper Rule (Action Leve ead and Copper Rule)  Synthetic Org  4-D  4,5-TP (Silvex)  Alachlor  Atrazine  Benzo(a)pyrene (PAHs)  Carbofuran  Chlordane  Dalapon	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	141.62(b)	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	141.23(a, c) 141.23(a, c) 141.86–141.89 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h)
Lead and Copper Rule (Action Leve Lead and Copper Rule (Synthetic Orgon, 4-D. 2,4-D. 2,4-5-TP (Silvex) Alachlor Atrazine Benzo(a)pyrene (PAHs) Carbofuran Chlordane Dalapon Di (2-ethylhexyl) adipate Di (2-ethylhexyl) phthalate	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	141.62(b)	3 3 1.3 mg/L) 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	141.23(a, c) 141.23(a, c) 141.86–141.89 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h)
Lead and Copper Rule (Action Leve  Lead and Copper Rule (Synthetic Orgon, 4-D., 4,5-TP (Silvex)  Llachlor  Lead and Copper Rule (Synthetic Orgon, 4-D., 4,5-TP (Silvex)  Llachlor  Litrazine (PAHs) (Senzo(a) pyrene (PAHs)	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	141.62(b)	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	141.23(a, c) 141.23(a, c) 141.86–141.89 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h)
Lead and Copper Rule (Action Leve ead and Copper Rule)  Synthetic Org  4-D  4,5-TP (Silvex)  Alachlor  Ala	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	141.62(b)	3 3 1.3 mg/L) 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	141.23(a, c) 141.23(a, c) 141.86–141.89 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h)
Lead and Copper Rule (Action Leve ead and Copper Rule)  Lead and Copper Rule  Synthetic Org  2,4-D  3,4,5-TP (Silvex)  Lachlor  Litrazine  Benzo(a)pyrene (PAHs)  Carbofuran  Chlordane  Dalapon  Di (2-ethylhexyl) adipate  Di (2-ethylhexyl) phthalate  Dibromochloropropane  Dinoseb	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	141.62(b)	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	141.23(a, c) 141.23(a, c) 141.86–141.89 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h)
Lead and Copper Rule (Action Leve ead and Copper Rule  Synthetic Org  ,4-D  ,4,5-TP (Silvex)  ,lachlor  ttrazine Benzo(a)pyrene (PAHs) Carbofuran  chlordane Dalapon Dii (2-ethylhexyl) adipate Dii (2-ethylhexyl) phthalate Dibromochloropopane Dinoseb Dioxin (2,3,7,8-TCDD)	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	141.62(b)	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	141.23(a, c) 141.23(a, c) 141.86–141.89 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h)
Lead and Copper Rule (Action Leve ead and Copper Rule  Synthetic Org  ,4-D ,4,5-TP (Silvex) ,lachlor ,trazine Benzo(a)pyrene (PAHs) Carbofuran Chlordane Dalapon Di (2-ethylhexyl) adipate Di (2-ethylhexyl) phhalate Dioiromochloropropane Dioxin (2,3,7,8-TCDD) Dioquat	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	141.62(b)	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	141.23(a, c) 141.23(a, c) 141.86–141.89 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h)
Lead and Copper Rule (Action Leve ead and Copper Rule Synthetic Org.,4-D.,4,5-TP (Silvex)	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	141.62(b)	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	141.23(a, c) 141.23(a, c) 141.86–141.89 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h)
Lead and Copper Rule (Action Leve ead and Copper Rule Synthetic Org.,4-D.,4,5-TP (Silvex)	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	141.62(b)	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	141.23(a, c) 141.23(a, c) 141.86–141.89 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h)
Lead and Copper Rule (Action Leve ead and Copper Rule)  Synthetic Org  4-D  4,5-TP (Silvex)  Alachlor  Atrazine  Benzo(a)pyrene (PAHs)  Carbofuran  Chlordane  Dalapon  Di (2-ethylhexyl) adipate  Di (2-ethylhexyl) phthalate  Dibromochloropropane  Dinoseb  Dioxin (2,3,7,8-TCDD)  Diquat  Indothall  Indrin  Ethylene dibromide	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	141.62(b)	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	141.23(a, c) 141.23(a, c) 141.86–141.89 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h) 141.24(h)
Lead and Copper Rule (Action Leve ead and Copper Rule)  Synthetic Org  4,4-D  4,5-TP (Silvex)  Alachlor  Atrazine  Benzo(a)pyrene (PAHs)  Carbofuran  Chlordane  Dalapon  Di (2-ethylhexyl) adipate  Di (2-ethylhexyl) phthalate  Dibromochloropropane  Dinoseb  Dioxin (2,3,7,8-TCDD)  Diquat  Indorin  Ethylene dibromide  Glyphosate	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	141.62(b)	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	141.23(a, c) 141.23(a, c) 141.86–141.89 141.24(h)
Lead and Copper Rule (Action Leve ead and Copper Rule)  Synthetic Org  2,4-D  3,4,5-TP (Silvex)  Alachlor  Atrazine  Benzo(a)pyrene (PAHs)  Carbofuran  Chlordane  Dalapon  Di (2-ethylhexyl) adipate  Di (2-ethylhexyl) phthalate  Di (2-ethylhexyl) phthalate  Dioxin (2,3,7,8-TCDD)  Diquat  Endothall  Endothall  Endothall  Endothall  Endothone  Dipyphosate  Belptachlor	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	141.62(b)	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	141.23(a, c) 141.23(a, c) 141.86–141.89 141.24(h)
Lead and Copper Rule (Action Leve Lead and Copper Rule)  Lead and Copper Rule  Synthetic Org  2,4-D  2,4,5-TP (Silvex)  Alachlor  Atrazine  Benzo(a)pyrene (PAHs)  Carbofuran  Chlordane  Dalapon  Di (2-ethylhexyl) adipate  Di (2-ethylhexyl) phthalate  Di (2-ethylhexyl) phthalate  Dicoroseb  Dioxin (2,3,7,8-TCDD)  Diquat  Endothall  Endothall  Endothall  Endothosate  Leptachlor  Leptachlor epoxide	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	141.62(b)	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	141.23(a, c) 141.23(a, c) 141.23(a, c)  141.86–141.89  141.24(h)
Lead and Copper Rule (Action Leve Lead and Copper Rule)  Lead and Copper Rule  Synthetic Org  2,4-D  2,4,5-TP (Silvex)  Alachlor  Atrazine  Benzo(a)pyrene (PAHs)  Carbofuran  Chlordane  Dalapon  Di (2-ethylhexyl) adipate  Di (2-ethylhexyl) phthalate  Dibromochloropopane  Dinoseb  Dioxin (2,3,7,8-TCDD)  Diquat  Indorin  Ethylene dibromide  Glyphosate  Heptachlor  Heptachlor epoxide  Hexachlorobenzene	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	141.62(b)	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	141.23(a, c) 141.23(a, c) 141.23(a, c)  141.86–141.89  141.24(h)
Lead and Copper Rule (Action Leve Lead and Copper Rule)  Lead and Copper Rule  Synthetic Org  2,4-D  2,4,5-TP (Silvex)  Alachlor  Atrazine  Benzo(a)pyrene (PAHs)  Carbofuran  Chlordane  Dalapon  Di (2-ethylhexyl) adipate  Di (2-ethylhexyl) phthalate  Dicromochlororopane  Dinoseb  Dioxin (2,3,7,8-TCDD)  Diquat  Endothall  Indrin  Ethylene dibromide  Belptachlor  Beptachlor  Beptachlor  Beptachlor  Beptachlor  Beptachlor  Beptachlor  Beptachlor  Beptachlor  Beptachlor epoxide  Bexachlorobenzene  Bexachlorocyclopentadiene	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	141.62(b)	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	141.23(a, c) 141.23(a, c) 141.23(a, c)  141.86–141.89  141.24(h)
Lead and Copper Rule (Action Leve ead and Copper Rule)  Lead and Copper Rule  Synthetic Org  2,4-D  2,4,5-TP (Silvex)  Alachlor  Atrazine  Benzo(a)pyrene (PAHs)  Carbofuran  Chlordane  Dalapon  Di (2-ethylhexyl) adipate  Di (2-ethylhexyl) phthalate  Disormochloropropane  Dinoseb  Dioxin (2,3,7,8-TCDD)  Diquat Endothall Endrin Ethylene dibromide  Blyphosate Heptachlor epoxide Heptachlor epoxide Hexachlorocyclopentadiene Elexachlorocyclopentadiene Lindane	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	141.62(b)	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	141.23(a, c) 141.23(a, c) 141.23(a, c)  141.86–141.89  141.24(h)
Lead and Copper Rule (Action Leve ead and Copper Rule)  Lead and Copper Rule  Synthetic Org  2,4-D  2,4,5-TP (Silvex)  Nachlor  Attrazine  Benzo(a)pyrene (PAHs)  Carbofuran  Chlordane  Dalapon  Di (2-ethylhexyl) adipate  Di (2-ethylhexyl) phthalate  Dinoseb  Dioxin (2,3,7,8-TCDD)  Diquat  Endothall  Endrin  Ethylene dibromide  Bleptachlor  Betaachlor epoxide  Hestachlor osyclopentadiene  indane  Methoxychlor	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	141.62(b)	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	141.23(a, c) 141.23(a, c) 141.23(a, c)  141.86–141.89  141.24(h)
Lead and Copper Rule (Action Leve Lead and Copper Rule)  Lead and Copper Rule  Synthetic Org  2,4-D  2,4,5-TP (Silvex)  Alachlor  Atrazine  Benzo(a)pyrene (PAHs)  Carbofuran  Chlordane  Dalapon  Di (2-ethylhexyl) adipate  Di (2-ethylhexyl) phthalate  Dibromochloropropane  Dinoseb  Dioxin (2,3,7,8-TCDD)  Diquat  Endothall Endrin Ethylene dibromide  Glyphosate  Heptachlor Heptachlor epoxide Hexachlorocyclopentadiene Indane  Methoxychlor  Dxamyl (Vydate)	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	141.62(b)	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	141.23(a, c) 141.23(a, c) 141.23(a, c)  141.86–141.89  141.24(h)
Lead and Copper Rule (Action Leve Lead and Copper Rule)  Lead and Copper Rule  Synthetic Org  2,4-D  2,4,5-TP (Silvex)  Alachlor  Atrazine  Benzo(a)pyrene (PAHs)  Carbofuran  Chlordane  Dialapon  Di (2-ethylhexyl) adipate  Di (2-ethylhexyl) phthalate  Dibromochloropropane  Dinoseb  Dioxin (2,3,7,8-TCDD)  Diquat  Endothall  Endrin  Ethylene dibromide  Slyphosate  Heptachlor epoxide  Hexachlorobenzene  Hexachlorocyclopentadiene  Lindane  Methoxychlor  Dxamyl (Vydate)  Pentachlorophenol	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	141.62(b)	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	141.23(a, c) 141.23(a, c) 141.23(a, c)  141.86–141.89  141.24(h)
Lead and Copper Rule (Action Leve Lead and Copper Rule)  Lead and Copper Rule  Synthetic Org  2,4-D  2,4,5-TP (Silvex)  Alachlor  Atrazine  Benzo(a)pyrene (PAHs)  Carbofuran  Chlordane  Dalapon  Di (2-ethylhexyl) adipate  Di (2-ethylhexyl) phthalate  Dicy-ethylhexyl) phthalate  Dicy-endothall  Endothall  Endothall  Endorhall  Endorhor  Ethylene dibromide  Silyphosate  Heptachlor epoxide  Hexachlorobenzene  Hexachlorocyclopentadiene  Lindane  Methoxychlor  Dxamyl (Vydate)  Pentachlorophenol  Picloram	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	141.62(b)	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	141.23(a, c) 141.23(a, c) 141.23(a, c)  141.86–141.89  141.24(h)
Lead and Copper Rule (Action Leve  Lead and Copper Rule Synthetic Org  2,4-D  2,4-D  2,4,5-TP (Silvex)  Alachlor  Atrazine  Benzo(a)pyrene (PAHs)  Carbofuran  Chlordane  Dalapon  Di (2-ethylhexyl) adipate  Di (2-ethylhexyl) phthalate  Dibromochloropropane  Dinoseb  Dioxin (2,3,7,8-TCDD)  Diquat  Endothall Endrin Ethylene dibromide  Blyphosate Heptachlor Heptachlor Heptachlor epoxide Hexachlorobenzene Hexachlorocyclopentadiene Lindane  Methoxychlor  Doxamyl (Vydate) Pentachlorophenol  Picloram  Polychlorinated biphenyls (PCBs)	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	141.62(b)	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	141.23(a, c) 141.23(a, c) 141.23(a, c)  141.86–141.89  141.24(h)
Lead and Copper Rule (Action Leve  Lead and Copper Rule (Synthetic Org	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	141.62(b)	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	141.23(a, c) 141.23(a, c) 141.23(a, c)  141.86–141.89  141.24(h)

APPENDIX A TO SUBPART Q OF PART 141.—NPDWR VIOLATIONS AND OTHER SITUATIONS REQUIRING PUBLIC NOTICE<sup>1</sup> (INCLUDING D/DBP AND IESWTR VIOLATIONS)—Continued

	MCL/MRDL/TT violations <sup>2</sup>		Monitoring and testing procedure violations	
Contaminant	Tier of pub- lic notice required	Citation	Tier of pub- lic notice required	Citation
Volatile Orga	nic Chemical	s (VOCs)		
Benzene	2	141.61(a)	3	141.24(f)
Carbon tetrachloride	2	141.61(a)	3	141.24(f)
Chlorobenzene (monochlorobenzene)	2	141.61(a)	3	141.24(f)
o-Dichlorobenzene	2	141.61(a)	3	141.24(f)
p-Dichlorobenzene	2	141.61(a)	3	141.24(f)
1,2-Dichloroethane	2	141.61(a)	3	141.24(f)
1,1-Dichloroethylene	2	141.61(a)	3	141.24(f)
cis-1,2-Dichloroethylene	2	141.61(a)	3	141.24(f)
trans-1,2-Dichloroethylene	2	141.61(a)	3	141.24(f)
Dichloromethane	2	141.61(a)	3	141.24(f)
1,2-Dichloropropane	2	141.61(a)	3	141.24(f)
Ethylbenzene	2	141.61(a)	3	141.24(f)
Styrene	2	141.61(a)	3	141.24(f)
Tetrachloroethylene	2	141.61(a)	3	141.24(f)
Toluene	2	141.61(a)	3	141.24(f)
1,2,4-Trichlorobenzene	2	141.61(a)	3	141.24(f)
1,1,1-Trichloroethane	2	141.61(a)	3	141.24(f)
1,1,2-Trichloroethane	2	141.61(a)	3	141.24(f)
Trichloroethylene	2	141.61(a)	3	141.24(f)
Vinyl chloride	2	141.61(a)	3	141.24(f)
Xylenes (total)	2	141.61(a)	3	141.24(f)
Padinac	tive Contamin	ante		.,
Nauioac	tive Containin			
Beta/photon emitters	2	141.16	3	141.25(a), 141.26(b)
Alpha emitters	2	141.15(b)	3	141.25(a), 141.26(a)
Combined radium (226 & 228)	2	141.15(a)	3	141.25(a), 141.26(a)
ing water, disinfectants combine with organic and inorgan ucts (DBPs). EPA also sets standards for controlling the trihalomethanes (THMs) and haloacetic acids (HAAs). <sup>5</sup>				
Total trihalomethanes (TTHMs)	2	141.12,6 141.64(a)	3	141.30, 141.132(a-b)
—Bromoform				
Haloacetic Acids (HAA5)				
rialdacette Acids (riAAJ)	2	141.64(a)	3	141.132(a–b)
Monochloroacetic acid	2	141.64(a)	3	141.132(a-b)
	2	141.64(a)	3	141.132(a-b)
<ul><li>—Monochloroacetic acid</li><li>—Dichloroacetic acid</li><li>—Trichloroacetic acid</li></ul>	2	141.64(a)	3	141.132(a-b)
Monochloroacetic acidDichloroacetic acidTrichloroacetic acidMonobromoacetic acid		, ,	3	, ,
	2	141.64(a)	3	141.132(a-b)
Monochloroacetic acidDichloroacetic acidTrichloroacetic acidMonobromoacetic acid Bromate	2 2	141.64(a) 141.64(a)	3 3	141.132(a-b) 141.132(a-b)
Monochloroacetic acidDichloroacetic acidTrichloroacetic acidMonobromoacetic acid Bromate	2 2 2	141.64(a) 141.64(a) 141.65(a)	3 3 3	141.132(a-b) 141.132(a-b) 141.132(a, c)
Monochloroacetic acidDichloroacetic acidTrichloroacetic acidMonobromoacetic acid Bromate	2 2 2 2	141.64(a) 141.64(a) 141.65(a) 141.65(a)	3 3 3 3	141.132(a-b) 141.132(a-b) 141.132(a, c) 141.132(a, c)
—Monochloroacetic acid  —Dichloroacetic acid  —Trichloroacetic acid  —Monobromoacetic acid  Bromate	2 2 2	141.64(a) 141.64(a) 141.65(a) 141.65(a)	3 3 3	141.132(a-b) 141.132(a-b) 141.132(a, c) 141.132(a, c) 141.132(a, c),
—Monochloroacetic acid  —Dichloroacetic acid  —Trichloroacetic acid  —Monobromoacetic acid  Bromate	2 2 2 2 2 2	141.64(a) 141.64(a) 141.65(a) 141.65(a) 141.65(a), 141.133(c)(2).	3 3 3 3 3	141.132(a-b) 141.132(a-b) 141.132(a, c) 141.132(a, c) 141.132(a, c), 141.133(c)(2)
—Monochloroacetic acid  —Dichloroacetic acid  —Trichloroacetic acid  —Monobromoacetic acid  Bromate	2 2 2 2	141.64(a)	3 3 3 3	141.132(a-b) 141.132(a-b) 141.132(a, c) 141.132(a, c) 141.132(a, c), 141.132(a, c), 141.132(a, c),
—Monochloroacetic acid —Dichloroacetic acid —Trichloroacetic acid —Monobromoacetic acid Bromate —Chlorite —Chlorine (MRDL) —Chloramine (MRDL) —Chlorine dioxide (MRDL), ≥2 consecutive samples at entry point only are above MRDL.  Chlorine dioxide (MRDL), sample(s) in distribution system above MRDL.	2 2 2 2 2	141.64(a)	3 3 3 3 3	141.132(a-b) 141.132(a-b) 141.132(a, c) 141.132(a, c) 141.132(a, c), 141.133(c)(2) 141.132(a, c), 141.133(c)(2)
—Monochloroacetic acid —Dichloroacetic acid —Trichloroacetic acid —Monobromoacetic acid Bromate —Chlorite —Chlorine (MRDL) —Chloramine (MRDL) —Chlorine dioxide (MRDL), ≥2 consecutive samples at entry point only are above MRDL.  Chlorine dioxide (MRDL), sample(s) in distribution system above MRDL.  Control of DBP precursors—TOC (TT)	2 2 2 2 2 1	141.64(a)	3 3 3 3 1	141.132(a-b) 141.132(a-b) 141.132(a, c) 141.132(a, c) 141.132(a, c), 141.133(c)(2) 141.132(a, c), 141.132(a, c), 141.132(a, d)
—Monochloroacetic acid —Dichloroacetic acid —Trichloroacetic acid —Monobromoacetic acid Bromate —Chlorite —Chlorine (MRDL) —Chloramine (MRDL) —Chlorine dioxide (MRDL), ≥2 consecutive samples at entry point only are above MRDL.  Chlorine dioxide (MRDL), sample(s) in distribution system above MRDL.  Control of DBP precursors—TOC (TT)  Bench marking and disinfection profiling	2 2 2 2 2 1 1 2 N/A	141.64(a)	3 3 3 3 1	141.132(a-b) 141.132(a-b) 141.132(a, c) 141.132(a, c) 141.132(a, c), 141.132(a, c), 141.132(a, c), 141.132(a, d) 141.132(a, d)
—Monochloroacetic acid  —Dichloroacetic acid  —Trichloroacetic acid  —Monobromoacetic acid  Bromate  Chlorite  Chlorine (MRDL)  Chloramine (MRDL)  Chlorine dioxide (MRDL), ≥2 consecutive samples at entry point only are above MRDL.  Chlorine dioxide (MRDL), sample(s) in distribution system above MRDL.  Control of DBP precursors—TOC (TT)  Bench marking and disinfection profiling  Development of monitoring plan	2 2 2 2 2 1 1 2 N/A N/A	141.64(a)	3 3 3 3 1	141.132(a-b) 141.132(a-b) 141.132(a, c) 141.132(a, c) 141.132(a, c), 141.133(c)(2) 141.132(a, c), 141.132(a, d)
—Monochloroacetic acid —Dichloroacetic acid —Trichloroacetic acid —Monobromoacetic acid Bromate —Chlorite —Chlorine (MRDL) —Chloramine (MRDL) —Chlorine dioxide (MRDL), ≥2 consecutive samples at entry point only are above MRDL. Chlorine dioxide (MRDL), sample(s) in distribution system above MRDL. Control of DBP precursors—TOC (TT) Bench marking and disinfection profiling Development of monitoring plan	2 2 2 2 2 1 1 2 N/A	141.64(a)	3 3 3 3 1	141.132(a-b) 141.132(a-b) 141.132(a, c) 141.132(a, c) 141.132(a, c), 141.132(a, c), 141.132(a, c), 141.132(a, d) 141.132(a, d)
—Monochloroacetic acid —Dichloroacetic acid —Trichloroacetic acid —Monobromoacetic acid Bromate	2 2 2 2 2 1 1 2 N/A N/A	141.64(a)	3 3 3 3 1	141.132(a-b) 141.132(a-b) 141.132(a, c) 141.132(a, c) 141.132(a, c), 141.132(a, c), 141.132(a, c), 141.132(a, d) 141.132(a, d)
—Monochloroacetic acid —Dichloroacetic acid —Trichloroacetic acid —Monobromoacetic acid Bromate Chlorite Chlorine (MRDL) Chloramine (MRDL) Chlorine dioxide (MRDL), ≥2 consecutive samples at entry point only are above MRDL. Chlorine dioxide (MRDL), sample(s) in distribution system above MRDL. Control of DBP precursors—TOC (TT) Bench marking and disinfection profiling Development of monitoring plan	2 2 2 2 2 1 1 2 N/A N/A	141.64(a)	3 3 3 3 3 1 1 3 3 3	141.132(a-b) 141.132(a-b) 141.132(a, c) 141.132(a, c) 141.132(a, c), 141.132(a, c), 141.132(a, c), 141.132(a, d) 141.132(a, d) 141.172 141.132(f)
—Monochloroacetic acid  —Dichloroacetic acid  —Trichloroacetic acid  —Monobromoacetic acid  Bromate  —Chlorite  —Chlorine (MRDL)  —Chloramine (MRDL)  —Chlorine dioxide (MRDL), ≥2 consecutive samples at entry point only are above MRDL.  Chlorine dioxide (MRDL), sample(s) in distribution system above MRDL.  Control of DBP precursors—TOC (TT)  Bench marking and disinfection profiling  Development of monitoring plan  Other Tre	2 2 2 2 1 1 2 N/A N/A 2	141.64(a)	3 3 3 3 3 1 1 3 3 3	141.132(a-b) 141.132(a, c) 141.132(a, c) 141.132(a, c), 141.132(a, c), 141.132(a, c), 141.132(a, c), 141.132(a, d) 141.132(a, d) 141.172 141.132(f)

### APPENDIX A TO SUBPART Q OF PART 141.—NPDWR VIOLATIONS AND OTHER SITUATIONS REQUIRING PUBLIC NOTICE<sup>1</sup> (INCLUDING D/DBP AND IESWTR VIOLATIONS)—Continued

	MCL/MF	RDL/TT violations <sup>2</sup>	Monitoring and testing procedure violations			
Contaminant	Tier of pub- lic notice re- quired	Citation	Tier of pub- lic notice re- quired	Citation		
Nickel	N/A	N/A	3	141.23(c, k)		
III. Public Notification for Variances and Exemptions						
Operation under a variance or exemption	3 2	1415, 1416 <sup>8</sup> 1415, 1416	N/A N/A	N/A N/A		
IV. Other Situations	Requiring Pu	blic Notification				
Fluoride secondary maximum contaminant level (SMCL) exceedance.	3	143.3	N/A	N/A		
Availability of unregulated contaminant monitoring data	3 1 ( <sup>9</sup> )	141.40 141.2, 141.71(c)(2)(ii) N/A	N/A N/A N/A	N/A N/A N/A		

### Appendix A Endnotes

- 1. Violations and other situations not listed in this table do not require notice, unless otherwise determined by the primacy agency. Primacy agencies may move violations requiring public notice to a higher tier as well (e.g., Tier 3 to Tier 2).
- 2. MČL—Maximum contaminant level, MRDL—Maximum residual disinfectant level, TT—Treatment technique.
- 3. The term *Violations of National Primary Drinking Water Regulations (NPDWR)* is used here to include violations of MCL, MRDL, treatment technique, monitoring, and testing procedure requirements.
- 4. Most of the requirements of the Interim Enhanced Surface Water Treatment Rule (63 FR 69477) (§§ 141.170–141.171, 141.73–
- 141.174) become effective December 16, 2001 for Subpart H systems (surface water systems and ground water systems under the direct influence of surface water) serving more than 10,000. The Surface Water Treatment Rule (§§ 141.70–141.73, 141.74) remains in effect for these systems until that time. However, § 141.172 has some requirements that become effective as soon as April 16, 1999.
- 5. Subpart H community and non-transient non-community systems serving ≥10,000 must comply with new DBP MCLs, disinfectant MRDLs, and related monitoring requirements beginning December 16, 2001. All other community and non-transient non-community systems must meet the MCLs and MRDLs beginning December 16, 2003.
- 6. § 141.12 will no longer apply after December 16, 2003.
- 7. Monitoring is currently required for 34 unregulated contaminants listed in § 141.40. These include aldicarb, aldicarb sulfone, and aldicarb sulfoxide.
- 8. This citation refers to sections 1415 and 1416 of the Safe Drinking Water Act. There are no regulations requiring water systems to comply with the conditions of a variance or exemption. However, sections 1415 and 1416 require that "a schedule prescribed \* \* \* for a public water system granted a variance [or exemption] shall require compliance by the system \* \* \*"
- 9. Primacy agencies may place other situations in any tier they believe appropriate, based on threat to public health.

### APPENDIX B TO SUBPART Q OF PART 141.—STANDARD HEALTH EFFECTS LANGUAGE FOR PUBLIC NOTIFICATION

Contaminant	MCLG 1 mg/L	MCL <sup>2</sup> mg/L	Standard health effects language for public notification	
National Primary Drinking Water Regulations (NPDWR)				
		Microbiologica	I Contaminants	
1a. Total coliform	Zero	Presence <sup>3</sup>	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.	
1b. Fecal coliform/E. coli	Zero	Presence	Fecal coliforms and <i>E. coli</i> are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with severely compromised immune systems.	
2. Turbidity	None	1 NTU4/5 NTU⁵	Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.	

Contaminant	MCLG 1 mg/L	MCL <sup>2</sup> mg/L	Standard health effects language for public notification
Interim Enhanced Surface Water Treatment Rule (IESWTR) violations: 3. Giardia lamblia 4. Viruses 5. Heterotrophic plate count (HPC) bacteria 6 6. Legionella 7. Cryptosporidium	Zero	TT 7	Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.8
		Inorg	anics
8. Antimony	0.006	0.006	Some people who drink water containing antimony well in excess of the MCL over many years could experience increases in blood cholesterol and decreases in blood sugar.
9. Arsenic	None	0.05	_
10. Asbestos (>10 μm)	7 MFL <sup>9</sup>	7 MFL	Some people who drink water containing asbestos in excess of the MCL over many years may have an increased risk of developing benign intestinal polyps.
11. Barium	2	2	Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.
12. Beryllium	0.004	0.004	Some people who drink water containing beryllium well in excess of the MCL over many years could develop intestinal lesions.
13. Cadmium	0.005	0.005	Some people who drink water containing cadmium in excess of the MCL over many years could experience kidney damage.
14. Chromium (total)	0.1	0.1	Some people who use water containing chromium well in excess of the MCL over many years could experience allergic dermatitis.
15. Cyanide	0.2	0.2	
16. Fluoride	4.0	4.0	l =
17. Mercury (inorganic)	0.002	0.002	Some people who drink water containing inorganic mercury well in excess of the MCL over many years could experience kidney damage.
18. Nitrate	10	10	Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.
19. Nitrite	1	1	Infants below the age of six months who drink water containing nitrite in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.
20. Nitrate+Nitrite	10	10	Infants below the age of six months who drink water containing nitrate and nitrite in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.
21. Selenium	0.05	0.05	
22. Thallium	0.0005	0.002	Some people who drink water containing thallium in excess of the MCL over many years could experience hair loss, changes in their blood, or problems with their kidneys, intestines, or liver.
		Lead and C	opper Rule
23. Lead	Zero	TT 10	Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

Contaminant	MCLG 1 mg/L	MCL <sup>2</sup> mg/L	Standard health effects language for public notification
24. Copper	1.3	ТТ 11	Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.
		Synthetic Organ	nic Compounds
25. 2,4-D	0.07	0.07	Some people who drink water containing the weed killer 2,4-D well in excess of the MCL over many years could experience problems with their kidneys, liver, or adrenal glands.
26. 2,4,5-TP (Silvex)	0.05	0.05	
27. Alachlor	Zero	0.002	Some people who drink water containing alachlor in excess of the MCL over many years could have problems with their eyes, liver, kidneys, or spleen, experience anemia, or may have an increased risk of getting cancer.
28. Atrazine	0.003	0.003	
29. Benzo(a)pyrene (PAHs)	Zero	0.0002	Some people who drink water containing benzo(a)pyrene in excess of the MCL over many years may experience reproductive difficulties or may have an increased risk of getting cancer.
30. Carbofuran	0.04	0.04	Some people who drink water containing carbofuran in excess of the MCL over many years could experience problems with their blood, or nervous or reproductive systems.
31. Chlordane	Zero	0.002	Some people who drink water containing chlordane in excess of the MCL over many years could experience problems with their liver, or nervous system, and may have an increased risk of getting cancer.
32. Dalapon	0.2	0.2	Some people who drink water containing dalapon well in excess of the MCL over many years could experience minor kidney changes.
33. Di (2-ethylhexyl) adipate	0.4	0.4	
34. Di(2-ethylhexyl) phthalate	Zero	0.006	Some people who drink water containing di (2-ethylhexyl) phthalate in excess of the MCL over many years may have problems with their liver, or experience reproductive difficulties, and may have an increased risk of getting cancer.
35. Dibromochloropropane (DBCP)	Zero	0.0002	1
36. Dinoseb	0.007	0.007	ļ — — — — — — — — — — — — — — — — — — —
37. Dioxin (2,3,7,8-TCDD)	Zero	3×10 <sup>-8</sup>	, , ,
38. Diquat	0.02	0.02	Some people who drink water containing diquat in excess of the MCL over many years could get cataracts.
39. Endothall	0.1	0.1	Some people who drink water containing endothall in excess of the MCL over many years could experience problems with their stomach or intestines.
40. Endrin	0.002	0.002	Some people who drink water containing endrin in excess of the MCL over many years could experience liver problems.
41. Ethylene dibromide	Zero	0.00005	Some people who drink water containing ethylene dibromide in excess of the MCL over many years could experience problems with their liver, stomach, reproductive system, or kidneys, and may have an increased risk of getting cancer.
42. Glyphosate	0.7	0.7	l =
43. Heptachlor	Zero	0.0004	,
44. Heptachlor epoxide	Zero	0.0002	

Contaminant	MCLG 1 mg/L	MCL <sup>2</sup> mg/L	Standard health effects language for public notification
45. Hexachlorobenzene	Zero	0.001	Some people who drink water containing hexachlorobenzene in excess of the MCL over many years could experience problems with their liver or kidneys, or adverse reproductive effects, and may have an increased risk of getting cancer.
46. Hexachlorocyclo pentadiene	0.05	0.05	
47. Lindane	0.0002	0.0002	Some people who drink water containing lindane in excess of the MCL over many years could experience problems with their kidneys or liver.
48. Methoxychlor	0.04	0.04	
49. Oxamyl (Vydate)	0.2	0.2	Some people who drink water containing oxamyl in excess of the MCL over many years could experience slight nervous system effects.
50. Pentachlorophenol	Zero	0.001	Some people who drink water containing pentachlorophenol in excess of the MCL over many years could experience problems with their liver or kidneys, and may have an increased risk of getting cancer.
51. Picloram	0.5	0.5	
52. Polychlorinated biphenyls (PCBs).	Zero	0.0005	Some people who drink water containing PCBs in excess of the MCL over many years could experience changes in their skin, problems with their thymus gland, immune deficiencies, or reproductive or nervous system difficulties, and may have an increased risk of getting cancer.
53. Simazine	0.004	0.004	Some people who drink water containing simazine in excess of the MCL over many years could experience problems with their blood.
54. Toxaphene	Zero	0.003	Some people who drink water containing toxaphene in excess of the MCL over many years could have problems with their kidneys, liver, or thyroid, and may have an increased risk of getting cancer.
		Volatile Orgai	nic Chemicals
55. Benzene	Zero	0.005	Some people who drink water containing benzene in excess of the MCL over many years could experience anemia or a decrease in blood platelets, and may have an increased risk of getting cancer.
56. Carbon tetrachloride	Zero	0.005	Some people who drink water containing carbon tetrachloride in excess of the MCL over many years could experience problems with their liver and may have an increased risk of getting cancer.
57. Chlorobenzene (monochlorobenzene).	0.1	0.1	Some people who drink water containing chlorobenzene in excess of the MCL over many years could experience problems with their liver or kidneys.
58. o-Dichlorobenzene	0.6	0.6	cess of the MCL over many years could experience problems with their liver, kidneys, or circulatory systems.
59. <i>p</i> -Dichlorobenzene	0.075	0.075	Some people who drink water containing p-dichlorobenzene in excess of the MCL over many years could experience anemia, damage to their liver, kidneys, or spleen, or changes in their blood.
60. 1,2-Dichloroethane	Zero	0.005	Some people who drink water containing 1,2-dichloroethane in excess of the MCL over many years may have an increased risk of getting cancer.
61. 1,1-Dichloroethylene	0.007	0.007	Some people who drink water containing 1,1-dichloroethylene in excess of the MCL over many years could experience problems with their liver.
62. cis-1,2-Dichloroethylene	0.07	0.07	Some people who drink water containing cis-1,2-dichloroethylene in excess of the MCL over many years could experience problems with their liver.
63. trans-1,2-Dichloroethylene	0.1	0.1	Some people who drink water containing trans-1,2-dichloroethylene well in excess of the MCL over many years could experience problems with their liver.
64. Dichloromethane	Zero	0.005	
65. 1,2-Dichloropropane	Zero	0.005	Some people who drink water containing 1,2-dichloropropane in excess of the MCL over many years may have an increased risk of getting cancer.
66. Ethylbenzene	0.7	0.7	

Contaminant	MCLG 1 mg/L	MCL <sup>2</sup> mg/L	Standard health effects language for public notification
67. Styrene	0.1	0.1	Some people who drink water containing styrene well in excess of the MCL over many years could have problems with their liver, kidneys, or circulatory system.
68. Tetrachloroethylene	Zero	0.005	1
69. Toluene	1	1	Some people who drink water containing toluene well in excess of the MCL over many years could have problems with their nervous system, kidneys, or liver.
70. 1,2,4-Trichlorobenzene	0.07	0.07	Some people who drink water containing 1,2,4-trichlorobenzene well in excess of the MCL over many years could experience changes in their adrenal glands.
71. 1,1,1-Trichloroethane	0.2	0.2	Some people who drink water containing 1,1,1-trichloroethane in excess of the MCL over many years could experience problems with their liver, nervous system, or circulatory system.
72. 1,1,2-Trichloroethane	0.003	0.005	Some people who drink water containing 1,1,2-trichloroethane well in excess of the MCL over many years could have problems with their liver, kidneys, or immune systems.
73. Trichloroethylene	Zero	0.005	Some people who drink water containing trichloroethylene in excess of the MCL over many years could experience problems with their liver and may have an increased risk of getting cancer.
74. Vinyl chloride	Zero	0.002	Some people who drink water containing vinyl chloride in excess of the MCL over many years may have an increased risk of getting cancer.
75. Xylenes (total)	10	10	, , , ,
Radioactive Contaminants			
76. Beta/photon emitters	Zero	4 mrem/yr <sup>12</sup>	Certain minerals are radioactive and may emit forms of radiation known as photons and beta radiation. Some people who drink water containing beta and photon emitters in excess of the MCL over many years may have an increased risk of getting cancer.
77. Alpha emitters	Zero	15 pCi/L <sup>13</sup>	Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.
78. Combined radium (226 & 228)	Zero	5 pCi/L	Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.

Disinfection Byproducts (DBPs), Byproduct Precursors, and Disinfectant Residuals: Where disinfection is used in the treatment of drinking water, disinfectants combine with organic and inorganic matter present in water to form chemicals called disinfection byproducts (DBPs). EPA also sets standards for controlling the levels of disinfectants and DBPs in drinking water, which include trihalomethanes (THMs) and haloacetic acids (HAAs).<sup>14</sup>

		-	
79. Total trihalomethanes (TTHMs)  —Chloroform  —Bromodichloromethane  —Dibromochloromethane  —Bromoform	Zero <sup>15</sup> Zero 0.06 Zero	0.10/ 0.080 <sup>16</sup> <sup>17</sup>	Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous system, and may have an increased risk of getting cancer.
80. Haloacetic Acids (HAA5)	None Zero 0.3 None None	0.060 18	Some people who drink water containing HAAs in excess of the MCL over many years may have an increased risk of developing cancer.
81. Bromate	Zero	0.010	Some people who drink water containing bromate in excess of the MCL over many years may have an increased risk of developing cancer.
82. Chlorite	0.08	1.0	Some infants and young children who drink water containing chlorite in excess of the MCL could experience nervous system effects. Similar effects may occur in fetuses of pregnant mothers who drink water containing chlorite in excess of the MCL. Some people may experience anemia.
83. Chlorine	4 (MRDLG) <sup>19</sup>	4.0 (MRDL) <sup>20</sup>	Some people who contact drinking water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.

Contaminant	MCLG 1 mg/L	MCL <sup>2</sup> mg/L	Standard health effects language for public notification	
84. Chloramines	4 (MRDLG)	4.0 (MRDL)	Some people who contact drinking water containing chloramines well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chloramines well in excess of the MRDL could experience stomach discomfort or anemia.	
85a. Chlorine dioxide, >2 consecutive samples at entry point only are above MRDL.	0.8 (MRDLG)	0.8 (MRDL)	Some infants and young children who drink water containing chlorine dioxide in excess of the MRDL could experience nervous system effects. Similar effects may occur in fetuses of pregnant mothers who drink water containing chlorine dioxide in excess of the MRDL. Some people may experience anemia.  The chlorine dioxide violations reported today are the result of exceedances at the treatment facility only, not within the distribution system which delivers water to consumers. Continued compliance with chlorine dioxide levels within the distribution system minimizes the potential risk of these violations to consumers.	
85b. Chlorine dioxide, sample(s) in distribution system are above MRDL.	0.8 (MRDLG)	0.8 (MRDL)	Some infants and young children who drink water containing chlorine dioxide in excess of the MRDL could experience nervous system effects. Similar effects may occur in fetuses of pregnant mothers who drink water containing chlorine dioxide in excess of the MRDL. Some people may experience anemia.  The chlorine dioxide violations reported today include exceedances of the EPA standard within the distribution system which delivers water to consumers. Violations of the chlorine dioxide standard within the distribution system may harm human health based on short-term exposures. Certain groups, including fetuses, infants, and young children, may be especially susceptible to nervous system effects from excessive chlorine dioxide exposure.	
86. Control of DBP precursors (TOC).	None	ТТ	Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection by products. These byproducts include trihalomethanes (THMs) and haloacetic acids (HAAs), which may lead to adverse health effects, liver or kidney problems, or nervous system effects.	
	Other Treatment Techniques			
87. Acrylamide	Zero	TT	Some people who drink water containing high levels of acrylamide over a long period of time could have problems with their nervous system or blood, and may have an increased risk of getting cancer.	
88. Epichlorohydrin	Zero	TT	Some people who drink water containing high levels of epichlorohydrin over a long period of time could experience stomach problems, and may have an increased risk of getting cancer.	

#### **Appendix B Endnotes**

- 1. MCLG—Maximum contaminant level goal.
- 2. MCL—Maximum contaminant level.
- 3. For water systems analyzing at least 40 samples per month, no more than 5.0 percent of the monthly samples may be positive for total coliforms. For systems analyzing fewer than 40 samples per month, no more than one sample per month may be positive for total coliforms.
  - 4. NTU—Nephelometric turbidity unit.
- 5. The MCL for the monthly turbidity average is 1 NTU; the MCL for the 2-day average is 5 NTU. The standard language for turbidity may also be used where a turbidity exceedance is the reason for a treatment technique violation.
- 6. The bacteria detected by HPC are not necessarily harmful. HPC is simply an alternative method of determining disinfectant residual levels. The number of such bacteria is an indicator of whether there is enough disinfectant in the distribution system.
  - 7. TT—Treatment technique.

- 8. This language may be used for both SWTR and IESWTR violations.
  - 9. Millions of fibers per liter.
  - 10. Action Level=0.015 mg/L.
  - 11. Action Level=1.3 mg/L.
  - 12. Millirems per year.
  - 13. Picocuries per liter.
- 14. Surface water systems and ground water systems under the direct influence of surface water are regulated under Subpart H of 40 CFR part 141. Subpart H community and non-transient non-community systems serving ≥10,000 must comply with DBP MCLs and disinfectant maximum residual disinfectant levels (MRDLs) beginning December 16, 2001. All other community and non-transient noncommunity systems must meet the MCLs and MRDLs beginning December 16, 2003.
- 15. The MCLG for chloroform may change if the final DBP rule changes.
- 16. The MCL of 0.10 mg/l for TTHMs is in effect until December 16, 2001 for Subpart H community water systems larger than 10,000. This MCL is in effect until December 16, 2003 for community water systems with a population larger than 10,000 using only

- ground water not under the direct influence of surface water. After these deadlines, the MCL will be 0.080 mg/l. On December 16, 2003, all systems serving less than 10,000 will have to comply with the new MCL as well.
- 17. The MCL for total trihalomethanes is the sum of the concentrations of the individual trihalomethanes.
- 18. The MCL for haloacetic acids is the sum of the concentrations of the individual haloacetic acids.
- 19. MRDLG—Maximum residual disinfectant level goal.
- 20. MRDL—Maximum residual disinfectant level.

# Appendix C to Subpart Q of Part 141, List of Acronyms Used in Public Notification Regulation

- CCR Consumer Confidence Report
- CWS Community Water System
- DBP Disinfection Byproduct
- EPA Environmental Protection Agency IESWTR Interim Enhanced Surface Water
- Treatment Rule IOC Inorganic Chemical

LCR Lead and Copper Rule
MCL Maximum Contaminant Level
MCLG Maximum Contaminant Level Goal
MRDL Maximum Residual Disinfectant

Level

NCWS Non-Community Water System NPDWR National Primary Drinking Water Regulation

NTNCWS Non-Transient Non-Community Water System

OGWDW Office of Ground Water and Drinking Water

OW Office of Water PN Public Notification PWS Public Water System

SDWA Safe Drinking Water Act SMCL Secondary Maximum Contaminant

SOC Synthetic Organic Chemical SWTR Surface Water Treatment Rule TCR Total Coliform Rule TT Treatment Technique TWS Transient Non-Community Water

System VOC Volatile Organic Chemical

### PART 142—[AMENDED]

1. The authority citation for part 142 continues to read as follows:

**Authority:** 42 U.S.C. 300f, 300g–1, 300g–2, 300 g–3, 300g–4, 300 g–5, 300 g–6, 300 j–4, 300 j–9, and 300 j–11.

2. Section 142.14 is amended by redesignating paragraph (f) as (g) and adding a new (f), to read as follows:

### §142.14 Records kept by States.

\* \* \* \* \*

- (f) Public notification records under subpart Q of part 141 of this chapter received from public water systems (including the certifications of compliance and copies of the public notices) and any state determinations establishing alternative public notification requirements for the water systems must be retained for three years.
- 3. Section 142.15 is amended by revising paragraph (a)(1), to read as follows:

#### §142.15 Reports by States.

(a) \* \* \*

(1) New violations by public water systems in the State during the previous quarter of State regulations adopted to incorporate the requirements of national primary drinking water regulations, including violations of the public notification requirements under subpart Q of part 141 of this chapter;

4. Section 142.16 is amended by revising paragraph (a), to read as follows:

#### §142.16 Special primacy requirements.

(a) State public notification requirements. (1) Each State that has primary enforcement authority under this part must submit complete and final requests for approval of program revisions to adopt the requirements of subpart Q of part 141 of this chapter, using the procedures in § 142.12(b) through (d).

(2) As part of the revised primacy program, a State must also establish enforceable requirements and procedures when the State opts to add to or change the minimum requirements

under:

(i) 40 CFR 141.201(a)—To require public water systems to give a public notice for situations other than those listed in appendix A of subpart Q of part 141 of this chapter, where the State determines that the situation has the potential for serious adverse effects on human health;

(ii) 40 CFR 141.202(a)—To require public water systems to give a Tier 1 public notice (rather than a Tier 2 or Tier 3 notice) for violations or situations other than those listed in appendix A of subpart Q of part 141 of this chapter;

(iii) 40 CFR 141.202(b)(3)—To require public water systems to comply with additional Tier 1 public notification requirements set by the State subsequent to the initial 24-hour notice, as a result of their consultation with the

State required under § 141.202(b)(2) of this chapter;

(iv) 40 CFR 141.203(a)—To require the public water systems to provide a Tier 2 public notice (rather than Tier 3) for monitoring or testing procedure violations specified by the State;

(v) 40 CFR 141.203(b)—To grant public water systems an extension of time (up to three months) for distributing the Tier 2 public notice, under specific circumstances defined in the State's primacy program;

(vi) 40 CFR 141.203(b)—To require a different repeat notice frequency for the Tier 2 public notice (to be no less frequent than once per year), under specific circumstances defined in the States's primacy program; and

(vii) 40 CFR 141.203(c) and 141.204(c)—To require a different form and manner of delivery for Tier 2 and 3 public notices.

(3) At its option, a State may, by rule, and after notice and comment, establish alternative public notification requirements with respect to the form and content of the public notice required under subpart Q of part 141 of this chapter. The alternative requirements must provide the same type and amount of information required under subpart Q and must be designed to achieve an equivalent level of public notice of violations as would be achieved under subpart Q of part 141 of this chapter.

### PART 143—[AMENDED]

1. The authority citation for part 143 continues to read as follows:

Authority: 42 U.S.C. 300f et seq.

#### §143.5 [Amended]

2. Part 143 is amended by removing § 143.5.

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