

**ENVIRONMENTAL PROTECTION AGENCY**

**40 CFR Parts 141 and 142**

**RIN 2040-AC 99**

**[FRL-5967-2]**

**National Primary Drinking Water Regulations: Consumer Confidence Reports**

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Proposed rule and notice of alternative definition.

**SUMMARY:** EPA is proposing to require community water systems to prepare and provide to their customers annual reports on the quality of the water delivered by the systems. This action is mandated by the 1996 amendments to the Safe Drinking Water Act (SDWA). These reports would provide valuable information to consumers of tap water from community water systems and allow them to make personal health-based decisions regarding their drinking water consumption.

**DATES:** Written comments on this proposed rule must be received by EPA on or before March 30, 1998. EPA will hold a public meeting about the proposal in Washington, DC on March 3, 1998 beginning at 9 a.m. A second public meeting will take place in San Francisco, CA on March 10, 1998 beginning at 9 a.m.

**ADDRESSES:** Send written comments on this proposed rule to the Consumer Confidence Report Comment Clerk:

Water Docket MC-4101 (docket #W-97-18), Environmental Protection Agency: 401 M Street, S.W., Washington DC 20460. Please submit an original and three copies of your comments and enclosures (including references).

Commenters who want EPA to acknowledge receipt of their comments must enclose a self-addressed, stamped envelope. No facsimiles (faxes) will be accepted. Comments may also be submitted electronically to ow-docket@epamail.epa.gov. Electronic comments must be submitted as an ASCII file avoiding the use of special characters and forms of encryption. Electronic comments must be identified by Docket #W-97-18. Comments and data will also be accepted on disks in WordPerfect in 5.1 format or ASCII file format. Electronic comments on this notice may be filed online at many Federal Depository Libraries.

The record for this rulemaking has been established under docket #W-97-18, and includes supporting documentation as well as printed paper versions of electronic comments. The record is available for review at EPA's Water Docket: 401 M Street, S.W., Washington DC 20460. For access to the Docket materials, call 202-260-3027 between 9:00 a.m. and 3:30 p.m. for an appointment and reference "Docket #W-97-18".

The public meetings will take place in the following locations: Washington, DC—EPA Auditorium, 401 M St, SW, Washington, DC. San Francisco—EPA, 1st floor conference rooms, 75 Hawthorne Street, San Francisco, CA.

**FOR FURTHER INFORMATION CONTACT:** the Safe Drinking Water Hotline, toll free 800-426-4791 for general information about, and copies of, this document. For technical inquiries, contact: Françoise M. Brasier 202-260-5668 or Rob Allison 202-260-9836.

**SUPPLEMENTARY INFORMATION:**

**Table of Contents**

- I. Statutory Authority
- II. Consultation with Public Water Systems, State and Local Governments, Environmental Groups, Public Interest Groups, and Risk Communication Experts
- III. Discussion of Proposed Rule
  - A. Purpose and Applicability
  - B. Effective Dates and Rationale
  - C. Rationale for Content of the Reports
  - D. Required Health Information and Rationale
  - E. Report Delivery
  - F. Special State Primacy Requirements and Rationale
  - G. Health Effect Language and Rationale
- IV. Request for Public Comments
- V. Cost of Rule
- VI. Administrative Requirements
  - A. Executive Order 12866
  - B. Regulatory Flexibility Act
    - 1. General
    - 2. Use of Alternative Definition
  - C. Paperwork Reduction Act
  - D. Enhancing the Intergovernmental Partnership
  - E. Unfunded Mandates Reform Act
  - F. Environmental Justice
  - G. Risk to Children Analysis
  - H. National Technology Transfer and Advancement Act

**Regulated persons**

Potentially regulated persons are community water systems.

Category	Example of regulated entities
Publicly-owned CWSs .....	Municipalities; County Governments; Water districts; Water and Sewer Authorities.
Privately-owned CWSs .....	Private water utilities; homeowners associations.
Ancillary CWSs .....	Persons who deliver drinking water as an adjunct to their primary business (e.g. trailer parks, retirement homes).

The table is not intended to be exhaustive. It 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 § 141.151 of the rule. If you have questions regarding the applicability of this section to a particular entity, consult the persons listed in the **FOR FURTHER INFORMATION CONTACT** section.

**Consumer Right-To-Know Provisions in the Safe Drinking Water Act**

The 1996 amendments to the Safe Drinking Water Act 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 Consumer Confidence Reports are the centerpiece of public right-to-know

in SDWA. The information contained in these reports can raise consumers' awareness of where their water comes from, show them the process by which safe drinking water is delivered to their homes, educate them about the importance of prevention measures such as source water protection to a safe drinking water supply. The reports can be a tool that starts a dialogue between consumers and their drinking water utilities, and one that gets consumers more involved in decisions which may affect their health. The information can be a means for consumers, especially those with special health needs, to make informed decisions regarding their drinking water. And finally, the reports

are a key to unlock more drinking water information. They will provide access through references or telephone numbers to source water assessments, health effects data, and additional information about the water system. The Agency is considering demonstrating its support for the consumer confidence reports by establishing, in consultation with the states, an award program which would recognize innovative reports.

Other right-to-know provisions in SDWA include changes to the public notification requirements, which will give the consumers of public water supplies more accurate and timely information on violations. Persons served by a public water system must be given notice within 24 hours of any violation of a national drinking water standard "that has the potential to have serious adverse effects on human health as a result of short-term exposure." EPA's regulation making these changes is scheduled to be promulgated in August, 1999.

In addition, the public will have access to the completed source water assessments. 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 that source. The consumer confidence reports will provide information on the availability of the assessment for that water supply.

By August, 1999, EPA will develop a national contaminant occurrence data base, 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.

Finally, the public will be provided with early information on state variance decisions involving their public water system. Public water systems serving fewer than 10,000 persons that cannot meet national primary drinking water regulations may apply for a variance to use an alternate technology to meet the regulation. Consumers served by that water supply have a right to 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 and prevent 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, they

can ensure that the choices made—particularly by EPA and the states, but also by water suppliers—respond to the public's needs and concerns.

### I. Statutory Authority

Section 114 of the Safe Drinking Water Act Amendments of 1996 (Public Law 104-182), enacted August 6, 1996, amends Section 1414(c) of the Act (42 U.S.C. 300g-3(c)). A new section 1414(c)(4) provides for annual consumer confidence reports by community water systems to their customers. Section 1414(c)(4)(A) mandates a number of actions by the Administrator of the Environmental Protection Agency, who is required to develop and issue regulations within 24 months of the date of enactment (i.e. in August 1998). The regulations must be developed in consultation with public water systems, environmental groups, public interest groups, risk communication experts, the States, and other interested parties. The regulations must, at a minimum, require each community water system to mail to each customer of the system at least once annually a report on the level of contaminants in the drinking water purveyed by that system. The regulations are required by section 1414(c)(4)(A) to provide a "brief and plainly worded" definition of four terms: "maximum contaminant level goal," "maximum contaminant level," "variances," and "exemptions." In addition, section 1414(c)(4)(A) requires the regulations to contain brief statements in plain language regarding the health concerns that resulted in regulation of each regulated contaminant, and a brief and plainly worded explanation regarding contaminants that may reasonably be expected to be present in drinking water, including bottled water. Finally, section 1414(c)(4)(A) requires the regulations to provide for an EPA toll-free hotline that consumers can call for more information and explanation.

Section 1414 of SDWA, as amended, also provides, in a new section (c)(4)(B) of the Act, additional specific requirements for the contents of the consumer confidence reports. The reports are required to include, but need not be limited to, the following information:

- Information on the source of the water purveyed. (section 1414(c)(4)(B)(i))
- A brief and plainly worded definition of the terms "maximum contaminant level goal," "maximum contaminant level," "variances," and "exemptions," as provided in regulations by the Administrator. (section 1414(c)(4)(B)(ii))

- If any regulated contaminant is detected in the water purveyed by the community water system, a statement setting forth: (1) the maximum contaminant level goal, (2) the maximum contaminant level, (3) the level of such contaminant in the water system, and (4) for any regulated contaminant for which there has been a violation of the maximum contaminant level during the year covered by the report, the brief statement in plain language regarding the health concerns that resulted in regulation of that contaminant, as provided by the Administrator in regulations under section 1414(c)(4)(A). (section 1414(c)(4)(B)(iii))

- Information on compliance with national primary drinking water regulations, as required by the Administrator, and notice if the system is operating under a variance or exemption and the basis on which the variance or exemption was granted. (section 1414(c)(4)(B)(iv))

- Information on the levels of unregulated contaminants for which monitoring is required under section 1445(a)(2) (including levels of *Cryptosporidium* and radon where States determine they may be found.) (section 1414(c)(4)(B)(v))

- A statement that the presence of contaminants in drinking water does not necessarily indicate that the drinking water poses a health risk and that more information about contaminants and potential health effects can be obtained by calling the Safe Drinking Water hotline. (section 1414(c)(4)(B)(vi))

Section 1414(c)(4)(B) also provides that a community water system may include any additional information that it deems appropriate for public education. In addition, the Administrator may require, through regulation, a consumer confidence report to include for not more than three regulated contaminants, a brief statement in plain language regarding the health concerns that resulted in regulation of the contaminant even if there has not been a violation of the maximum contaminant level during the year concerned.

Section 1414(c)(4)(C) authorizes the Governor of a State to determine not to apply the mailing requirement to community water systems serving fewer than 10,000 persons. Such systems then would be required to inform their customers that the system will not be mailing the report; make the report available on request to the public; and publish the report annually in one or more local newspapers serving the areas in which the systems' customers are located.

Section 1414(c)(4)(D) allows those community water systems that are not required to meet the mailing requirements, and which serve 500 persons or fewer, to meet their consumer confidence report obligation by preparing an annual report and providing notice at least once per year to each customer by mail, by door-to-door delivery, by posting, or by any other means authorized in the regulations, that the consumer confidence report is available upon request.

Section 1414(c)(4)(E) provides that a State exercising primary enforcement responsibility may establish by rule, after public notice and comment, alternative requirements with respect to the form and content of the consumer confidence reports.

This rule, when issued in final form, is intended to fulfill the rulemaking requirements outlined in amended section 1414(c)(4).

## II. Consultation With Public Water Systems, State and Local Governments, Environmental Groups, Public Interest Groups, and Risk Communication Experts

As required under section 1414 of SDWA, as amended, the Agency has met extensively with a broad range of groups in the development of this proposed rule. Early in the regulatory development process, EPA held a series of meetings with community water system operators and customers located in California, to obtain information about California's annual Water Quality Reports requirement, which has been in effect since 1990, and to learn from the California program's experiences. In particular, EPA held meetings with operators of small rural public water systems at the California Rural Water Association Annual Meeting held in February 1997. Also in February 1997, EPA met with a focus group of water customers in California to obtain information about their reactions to receiving annual reports about drinking water quality and how such reports should be structured and used. Finally, EPA met with members of the Association of California Water Agencies, primarily including representatives from large public water systems, public utility commissions, cities, and metropolitan areas.

The Agency met four times between February and July 1997 with a special working group of the National Drinking Water Advisory Council (NDWAC). The Advisory Council has been established under Section 10(a)(2) of Public Law 92-423, "The Federal Advisory Committee Act" and SDWA. By law,

NDWAC is empowered to provide advice to EPA on regulatory issues. The Consumer Confidence Report Working Group, in turn, was established by NDWAC to provide advice to it on the particular issues raised in the development of EPA's regulation on consumer confidence reports.

The NDWAC Consumer Confidence Report Working Group was composed of a designated Federal officer; three NDWAC members who served as liaison between the full NDWAC and the Working Group; and eighteen other members. The Working Group contained members from public health organizations; local, State, and Federal government agencies with responsibilities for supervising public drinking water providers; operators of large and small drinking water systems; consumer representatives; environmental organizations; and business and trade associations. The Working Group met in four two-day sessions, between February and July 1997, to discuss issues raised by the consumer confidence report requirements in the 1996 SDWA amendments and to analyze and debate initial proposals for the consumer confidence report regulatory requirements. At the end of the Working Group meetings, in July 1997, the group submitted a draft of the regulations highlighting unresolved issues to the full NDWAC for its review. NDWAC in turn presented its recommendations to EPA on the regulation being proposed today in a NDWAC report submitted in August 1997. These documents are available in the Docket for this rulemaking.

In June 1997, EPA convened a one-day meeting of a group of private, State, and Federal experts in public health and the communication of risk-related information to general audiences. The panel critiqued preliminary ideas for the consumer confidence report regulatory requirements and provided suggestions to EPA on effective methods of communicating risk information.

As it developed today's regulatory proposal, EPA continued to meet with water system operators and customers. In May 1997 the Agency obtained the views of system operators in Wyoming, a State chosen because EPA operates the drinking water program in that State. The Agency also held a town meeting in Casper, Wyoming to solicit the views of water system customers.

EPA also received the views of a number of organizations on the potential contents of consumer confidence reports. In particular, Agency staff attended a one-day workshop in May 1997 sponsored by the

Environmental Law Institute in which water customers and citizens in the Washington, D.C. area discussed communication of drinking water information. EPA also was provided the results of a series of focus groups held in six locations across the country by the American Water Works Association to obtain information and viewpoints about drinking water risk communication issues.

EPA also discussed the proposal with, and received comments from, another EPA advisory group, the Local Government Advisory Committee. EPA discussed the statute and EPA's plans for developing the proposal at a meeting with the Committee in San Francisco in February 1997, and provided a draft of the rule to the Committee and discussed the draft at its meeting in New Orleans in May 1997.

The rule being proposed today is based on the NDWAC recommendations to EPA and has been developed in close consultation with public water systems, environmental groups, public interest groups, risk communication experts, the States, and other interested parties, as required by the 1996 Amendments.

## III. Discussion of Proposed Rule

### A. Purpose and Applicability

The rule being proposed today establishes the minimum requirements for the content of consumer confidence reports.

The rule would apply to existing and new community water systems. "Community water systems" are a subset of "public water systems." 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." "Community water systems" are public water systems which serve year-round residents. Thus, systems that do not have 15 or more service connections used by year-round residents or regularly supply at least 25 year-round residents are not subject to today's rule.

Out of the approximately 180 thousand water systems in the United States, only approximately 60 thousand are considered community water systems. They range from large municipal systems that serve millions of persons to small systems, which serve fewer than 100 persons. Community water systems can be further categorized as publicly-owned systems, including systems owned and operated by municipalities, townships, counties,

water districts, and water authorities; privately-owned systems, which may be owned and operated by groups ranging from investor owned water companies to homeowners associations; and ancillary systems, which are small systems that provide water as an ancillary function of their principal business or enterprise. Ancillary systems are primarily mobile home parks and a variety of institutional water providers. Public, private, and ancillary community water systems are all subject to today's rule.

The balance of the water systems in the United States, or approximately 130 thousand systems, are either so-called "transient non-community systems" which do not serve the same people on a day to day basis (for example, highway rest stops) or "non-transient non-community systems" which serve at least 25 of the same people at least 6 months of the year (for example, schools). Because today's rule applies only to community water systems, as provided by Congress in the 1996 Amendments to SDWA, transient and non-transient non-community systems are not covered.

EPA notes that water wholesalers are also considered community water systems. However, if such a system did not retail water to any customer, i.e. billing unit or drinking water hook-up, the system would not have to prepare a consumer confidence report. EPA notes that these systems already provide monitoring information to the States. They would have to provide that information to the purchaser so that the purchaser can prepare the consumer confidence report. In the case of consecutive systems, i.e. a chain of utilities which provide water to each other, the system delivering water to the customers would be the one preparing the consumer confidence report.

#### *B. Effective Dates and Rationale*

Today's rule would become effective 30 days after publication of the final rule in the **Federal Register** and community water systems would have to deliver the first report to their customers within 13 months of the effective date of the regulations. The Agency is anxious that these requirements become effective as soon as practicable because of the importance of this provision. The Agency also believes that the proposed dates are practicable since they would give systems a full 14 months to prepare their first report. Each consumer confidence report is required to describe monitoring results for the past twelve-month period. EPA believes that giving community water systems a period

slightly longer than a year to prepare the first report ensures that they will have the time to assemble the necessary information, to develop the necessary report format, and to arrange for distribution of the consumer confidence reports. In addition, some States are already implementing or developing their own reporting requirements. EPA also believes that the 14 month period after enactment of the rule would ensure that systems that had recently prepared a State mandated report would not be required to immediately prepare another report required by today's rule.

New community water systems, that is, community water systems that begin delivering water to customers after the effective date of today's rule, must deliver their first report within 18 months of the date that they begin delivering water to customers. EPA concluded that the longer period of time before delivery of the first reports would allow new systems to initiate and carry out a broader range of monitoring activities (some required monitoring requires at least one year's collection of data; other required monitoring may occur over a period in excess of 12 months). In addition, the 18 month period will allow new systems to develop and implement procedures for preparing and distributing the reports.

Some stakeholders argued that the Agency should propose that all reports be due on a certain date. They believed that this would give the reports more impact by allowing for an orchestrated outreach campaign at the time of issuance. The Agency believes however, that there are merits to allowing some flexibility since different utilities will have different start-up needs. States can make different decisions when they promulgate their regulations and would be free to impose a specific date for issuance of the consumer reports under their jurisdiction.

#### *C. Rationale for Content of the Reports*

In developing today's rule on the contents of consumer confidence reports prepared by community water systems, EPA sought to provide community water systems with the maximum amount of flexibility to design their reports, consistent with the requirements of the 1996 Amendments. The Agency therefore generally limited the requirements for the content of reports, found in §§ 141.153 and 141.154 of the proposed rule, to a clarification and explanation of the requirements in section 114 of the 1996 Amendments. In addition to today's rule, EPA is planning to prepare and issue detailed guidance that will provide supplementary information and

examples of ways in which systems can prepare and present the data in consumer confidence reports. The Agency also will develop, prior to the effective date of the rule computerized "fill-in-the-blank" templates that water systems will be able to use if they are unable or do not choose to develop their own consumer confidence report format. The Agency anticipates that very small systems, in particular, will be able to use these templates to minimize the burden of preparing the reports.

#### *1. Information on the Source of the Water Purveyed*

Consumer confidence reports are intended primarily to convey information to persons served by community water systems about the quality of the water they are consuming. Thus, the emphasis of the reports is on "finished" rather than "source" water. Congress did, however, require the reports to include information about the sources of the water delivered by the system. In addition, many of the participants in public meetings on the consumer confidence reports held by EPA, and the members of the expert panel on risk communication convened by EPA, argued that the reports will be substantially more interesting and useful to persons if the reports provide context for the information about finished water. Therefore, today's rule specifies that each report must identify the sources of the water delivered by the community water system by providing information on the type of water (that is, whether the source is ground water, surface water, a combination of the two, or water obtained from another system); and the commonly used name or names (if any) and location of the body or bodies of water. Several commenters on the report requirements suggested to EPA that maps of water sources are a particularly effective means of communicating this information. The Agency is encouraging systems to use maps in the consumer confidence reports whenever possible, although maps have not been included in the mandatory contents of the reports.

One issue raised during the development of the proposal was whether the rule should require information on sources of contamination that may have an impact on the quality of the source water used by a community water system. Some stakeholders argued that if particular sources of contamination are known for the sources of water delivered by the community water system, the consumer confidence reports should provide a concise description of them. The public frequently has a general knowledge of

the contamination sources that affect particular surface water bodies, according to the advocates of this provision, and failing to provide information about them can reduce the credibility of the reports generally. Other stakeholders noted that the consumer confidence reports deal primarily with the quality of the finished water as it is delivered to its consumers. They argued that a requirement to provide information on contaminants in source water without regard to their presence in the finished water may lead to unnecessary concerns. The Agency notes the difficulty of definitively linking contaminants to specific sources and the liability issues that may arise if the reports attempt to do so without adequate documentation.

The 1996 Amendments to the Safe Drinking Water Act created a new program of source water assessments under section 1453 of the Act. The Agency has issued guidance on State Source Water Assessment and Protection Programs, under which States with primary enforcement authority must: (1) delineate the boundaries of the areas providing source waters for public water systems and (2) identify, to the extent practical, the origins of regulated and certain unregulated contaminants in the delineated area to determine the susceptibility of public water systems to such contaminants. Assessments are to be completed for all public water systems within two years after EPA's approval of the State's program with possible 18 month extensions.

In an effort to balance competing concerns regarding the provisions of information on contaminant sources in the report, today's rule creates a linkage with this Source Water Assessment program by requiring that if a source water assessment has been completed for the community water system, that system's consumer confidence report must notify customers of the availability of this information and the means to obtain it. This will allow interested parties to get accurate and detailed information on the sources of contaminants.

However, as recommended by the NDWAC, today's rule does not include a requirement that consumer confidence reports contain specific information about sources of contamination which may affect the quality of the source water, although it does require that generic information be provided about the likely sources of detected regulated contaminants. The Agency is inviting comments on this issue.

## 2. Definitions

The rule contains definitions in § 141.153 (c)(1) and (2) of four terms that must be used in consumer confidence reports: "Maximum contaminant level goal or MCLG," "Maximum Contaminant Level or MCL," "Variances," and "Exemptions." These definitions differ from those found in 40 CFR 141.2. The definitions are designed to explain key components of the national primary drinking water regulations in brief, plainly worded terms. The draft definitions were examined closely by the NDWAC Consumer Confidence Reports Working Group, by the expert panel, and by EPA's own staff. All of these reviewers recognized that the definitions, particularly the definitions for maximum contaminant level goal (MCLG) and maximum contaminant level (MCL), represent dramatic simplifications of complicated processes. The expert panel, in particular, recommended that EPA test these definitions and, if necessary, revise them. The Agency therefore is specifically requesting comments on these proposed definitions.

Maximum Contaminant Level Goal or MCLG is defined by the proposed rule as "The level of a contaminant in drinking water below which there is no known or expected risk to health." This definition therefore highlights the requirement in the SDWA that EPA set MCLGs at a level at which "no known or anticipated adverse effects on the health of persons occur and which allows an adequate margin of safety." The definition does not attempt to describe the use of Reference Doses to determine the MCLG for non-carcinogenic contaminants and Class C carcinogens, nor does it specify that for Class A and B carcinogens the MCLG must be set at zero. The expert panel was particularly concerned by the lack of context in the proposed definition, noting that it contains no information about how drinking water is determined to be safe. At the same time, the Panel recognized the difficulty of developing a simple and accurate description of the process that would be suitable for inclusion in the reports. Some panel members suggested that EPA develop a one-page handout on the process of setting MCLs and MCLGs, which could either be included in the reports or made separately available to drinking water consumers. EPA is requesting comment on this issue.

Maximum Contaminant Level or MCL is defined by the proposed rule as "the highest level of a contaminant that is allowed in drinking water." This

definition highlights the function of the MCL as an enforceable standard under the primary drinking water regulations. The agency is aware that this definition does not provide an explanation of how the MCLs are set. As provided by SDWA, EPA sets MCLs as close to the corresponding MCLGs as "feasible with the use of the best technology, treatment techniques, and other means, which the Administrator finds, after examination for efficacy under field conditions and not solely under laboratory conditions are available (taking cost into consideration)."

The expert panel in particular noted that these definitions do not provide any content for interpreting the health significance of a contaminant concentration above the MCLG but below the MCL and recommended that EPA use a longer definition of MCL such as: "the level determined to provide the best protection to health, given cost and treatment feasibility". The working group, however, was not able to agree on any characterization of the MCL beyond a minimal description of its regulatory function. Some members wanted to stress the safety factors built into the MCL setting process while others believed strongly that whenever an MCL is set above an MCLG the best protection to health is not achieved. One alternative would be to paraphrase language from the SDWA to provide additional context for the definitions. For example, MCLG might be defined as "The level of a contaminant in drinking water below which there is no known or expected risk to health, allowing an adequate margin of safety." MCL could then be defined as "The highest level of a contaminant that is allowed in drinking water, which is set as close to the MCL as feasible using the best available treatment technology." The Agency requests comments on the proposed definitions of both MCL and MCLG. Commenters should bear in mind that brevity and plain language are required by the Statute for these definitions.

The NDWAC Working Group recommended combining the definitions of variances and exemptions into a single definition, since in its opinion the two terms described a single concept. "Variances and exemptions" therefore are defined in the rule as "State permission not to meet an MCL or a treatment technique under certain conditions." Some members of the Working Group suggested adding the phrase "provided there is no unreasonable risk to health" to the definition, in order to inform report recipients that this is one of the statutory conditions for receiving a

variance or exemption. EPA is requesting comment on this suggestion.

The definitions section of the proposed rule also includes two definitions not mandated by the 1996 Amendments but considered necessary by EPA to address situations likely to be encountered by many systems. When an MCL cannot be established, EPA may set a treatment technique or action level. Section 141.153(c)(3) of the proposed rule states that when a report contains data on a contaminant for which EPA has set a treatment technique or an action level, the report must define treatment technique as "A required process intended to reduce the level of a contaminant in drinking water;" and must define action level as "The concentration of a contaminant which triggers treatment or other requirement which a water system must follow."

EPA notes that the use of these definitions in the consumer confidence reports is not meant in any way to alter the legal and enforceable definition of these terms.

### 3. Level of Detected Contaminants

Sections 1414(c)(4)(B)(iii) and (v) of SDWA as amended establish reporting requirements for "regulated" and "unregulated contaminants" detected in the water purveyed by a community water system. The Agency believes that information on contaminants detected by the system is the lynchpin of the reports. This is the information which will allow water consumers to make educated health-related decisions based on their personal circumstances. Therefore it is important that the information be as complete and accurate as feasible without falling into the trap of information overload.

As far as accuracy is concerned, the Agency is aware that choosing one number to put in the report which gives a true representation of the water that customers may have consumed during the year will sometimes be difficult. The quality of the water is subject to spatial and temporal variability. This variability is magnified in large systems where blending of several sources may occur. It is not feasible for the Agency to lay down hard and fast rules to deal with all instances where the quality of the water may be variable; therefore, the Agency is proposing a performance standard in § 141.153(d)(1) which requires operators to provide customers with an accurate picture of the level of contaminant they may have been exposed to during the year. The quantitative information on levels of detected contaminants may, however, provide only part of the picture. The Agency expects that systems may need

to provide qualitative explanations of water quality variations as well. These explanations could, for example, describe to customers the fact that warm temperatures facilitate microbial growth and may necessitate higher levels of disinfectant in the water. EPA requests comment on the usefulness of such information.

EPA recognizes that this rule will require water system operators to present information on contaminants detected at very low levels. The Agency does not intend that operators report levels beneath the Minimum Detection Limits, based upon the analytic requirements listed in 40 CFR 141 Subpart C, which are levels so low that they are analytically invalid.

EPA believes that, in order for the public to make well-informed health decisions, the reports should contain information available to the systems on any contaminant which may have an impact on the health of persons whether or not monitoring for these contaminants is currently required by regulations promulgated under the SDWA. While section 1414(c)(4) does not explicitly require that the reports contain all of this information, EPA believes that such reporting is authorized under both section 1414(c)(4)(B) (which states that the contents of the report must include, but not be limited to, certain items) and section 1445(a)(2) (which authorizes the Administrator to require regulated systems to report information to the public on unregulated contaminants). On the other hand, the Agency does not want inadvertently to stop systems from performing additional voluntary monitoring by requiring disclosure of information the significance of which they could not explain. Therefore the Agency is proposing to include a provision which strongly encourages systems to include in the reports any information indicating a possible health concern from contaminants for which EPA has proposed an NPDWR or issued a health advisory. If, for example, a contaminant is found at a level exceeding a proposed MCL or a health advisory level of concern, EPA believes that the system should disclose this result to its customers. On the other hand, if the system believes that its voluntary monitoring results are inconclusive or insignificant from a health standpoint, it need not report them.

EPA proposes that the reports address, in separate sections, (1) the results of monitoring mandated by regulation for both regulated and unregulated contaminants as mandated by section 1414(c)(4)(B)(iii) and (v), and

(2) the results of voluntary monitoring performed by the system that has shown a detection of radon or Cryptosporidium or the presence of any additional contaminant which a system elects to include in the reports.

With respect to the manner in which data are presented, the proposed rule contains a number of provisions:

a. The initial report must identify the twelve-month period that it covers. Subsequent reports must identify and cover successive twelve month periods, to ensure that gaps do not exist between periods covered by the reports.

b. Data on detected contaminants for which monitoring is mandatory would be displayed in a table. These data include contaminants subject to an MCL, action level or treatment technique (regulated contaminants), contaminants for which monitoring is required by § 141.40 (unregulated contaminants), and disinfection byproducts and microbiological contaminants (except Cryptosporidium) for which monitoring is required by §§ 141.140 and 141.142 (the information collection rule). The Agency is not mandating a particular format for the table. EPA is seeking to leave the maximum possible amount of flexibility to drinking water systems to design effective methods of presenting the required data. However, the rule would contain a number of provisions pertaining to the manner in which the data is presented.

If a system is allowed to monitor for certain contaminants less often than once a year, the report must include the date and results of the most recent sampling and a brief explanation (e.g. in a footnote) for why the sample was not taken within the reporting period (e.g., "monitoring only required once every 3 years").

The MCL for detected regulated contaminants should be presented in whole units. EPA has recalculated the MCLs in such units, and has incorporated them into Appendix A of the regulation. The MCLG for each contaminant should be expressed in the same units as the MCL. Detections also should be expressed in the same units. The Agency notes that it will continue to rely on the numbers reported to the State to comply with the regulations to determine compliance and undertake enforcement action if necessary. In no case would the way in which data is presented in the consumer confidence reports affect an enforcement decision on compliance with MCLs or action levels.

The expert panel encouraged EPA to allow community water systems to use illustrative examples to clarify the meaning of the detected levels (e.g., "equivalent to one drop in a railroad tank car"); in contrast, the NDWAC working group believed that such illustrations could be subject to misinterpretation or misuse. The Agency concluded that it would allow systems the

flexibility to adopt such examples, but would not encourage their use.

For contaminants subject to an NPDWR, EPA concluded that community water systems should be required to report "the highest test result used to determine compliance with an NPDWR." Thus, whenever compliance with an MCL is based on a monthly or quarterly average, the highest average for the year should be included in the table. If compliance is determined by averaging the results for various sampling points, only the average should be reported in the table. Several members of the NDWAC working group and members of the expert panel urged, instead, that ranges of results or highest values should be reported. Thus, when compliance is based on an average, in addition to reporting the average, the system would also report the highest value detected. The advocates of this approach noted that for some contaminants, such as TTHMs, parts of the distribution system may be exposed to concentrations above the average. The Agency concluded, however, that presentation of ranges and highest values could be confusing. Instead the Agency is proposing that for these contaminants, the reports clearly indicate that the results are based on an average and explain what an average means. Further, based on the NDWAC recommendations, the Agency is proposing an exception to this single number reporting. For MCLs such as TTHMs for which reporting is based on a system-wide average, and for which substantial variation of contaminant levels may occur within the distribution system, the reports should disclose instances where a significant portion (10%) of the population is consistently exposed to a level higher than the MCL. In such instances the reports would have to identify the portions of the service areas where consumers are exposed to these higher levels and specify what these levels are. The Agency would like specific comments on this issue. The Agency notes that these circumstances should not arise if the sampling points for TTHMs have been chosen in accordance with the regulations and is requesting commenters to submit specific data if they have information to the contrary. The Agency also notes that, at this time, this requirement would have no impact on systems serving fewer than 10,000 persons since they are exempt from the TTHM requirements. The Agency is also requesting comment on whether it is necessary for the reports to note contaminant levels that are averages and explain what that means for chronic contaminants where the MCL is based on cumulative exposure over many years.

EPA notes that while in the case of some regulated contaminants, water systems would report averages rather than the single highest level, in the case of detected unregulated contaminants, it expects water systems to report the highest detected level. Some concern was raised that this single highest level might not be representative of the water quality, and that consumers might be better served by putting in place instead a performance standard for the unregulated contaminants similar to that for the regulated contaminants, requiring systems to provide

customers with an accurate picture of the level of contaminants they may have been exposed to during the year. The Agency is requesting comment on this issue.

The proposed rule would require community water systems to include in the table the likely source of any detected regulated contaminant. In general EPA is expecting systems to describe these sources in generic terms such as "agricultural runoff", "petrochemical plants". In some cases, however the system may have information obtained through a source water assessment which would allow the report to be more specific. When the source is not definitely known the system should include in the table the generic description of major sources derived from Appendix A. The inclusion of this requirement was the subject of lengthy discussion among stakeholders. While some believe that it is important for the public to understand that contaminants in the finished water are often the result of activities which are not under the control of the water systems, others were concerned that requiring operators, particularly of small systems, to seek specific information would be too burdensome. The Agency believes that providing generic descriptions for use in cases where a specific source is not definitely known appropriately balances those concerns. The Agency is requesting comments on this requirement and particularly on the usefulness of the generic list and on its wording.

The proposed rule requires a community water source that distributes water to its customers from several raw sources which are not blended, to include a separate column in its table of results for each service area. The report should also identify the service area for each entry point into the distribution system.

Today's rule requires community water systems to include specific information in their consumer confidence reports for every regulated contaminant detected in violation of an MCL. This information, which must include a clear and readily understandable explanation of the violation, the potential health effects, and the actions taken by the system to address the violation, need not be included in the table of results (though it may be). Instead, the system may provide the required information in a separate section on violations and what they mean, although that section should be clearly labeled as addressing violations and situated close to the table of results. The description of potential adverse health effects included in this section would use the relevant language of Appendix B. A discussion of the linkages between this proposed requirement and the requirements for public notification is included in Section VI of this preamble.

c. Additionally today's rule would require water systems to provide information on detection of Cryptosporidium, radon and other currently unregulated contaminants.

Information on Cryptosporidium would be included whether it is detected in compliance with the ICR regulations or through voluntary monitoring performed by a system. Specifically, the reports must

include a summary of the monitoring results, information on how the monitoring was performed, and an explanation of the significance of the results. When EPA promulgated the ICR, it explained that its intent in collecting these data was to gain information that it could use in aggregate to determine national occurrence of Cryptosporidium and evaluate the treatment cost implications of new regulations. The Agency emphasized that these data should not be used to make judgements about the compliance of any specific water system with drinking water standards. The Agency is not changing this policy and remains aware that Cryptosporidium presents difficult measurement challenges. EPA was clear in its preamble for the ICR (61 FR 24363, May 14, 1996) that laboratory approval criteria for the ICR were designed to conduct national regulatory impact analysis and that better method performance would be needed for individual systems to comply with future rules. Therefore, while EPA believes that it is appropriate for the systems to disclose these results to their customers it is not dictating how. The proposed rule requires water systems that detect Cryptosporidium to summarize the results of monitoring but is not requiring that these data be included in the table to give systems more flexibility regarding how they display the information and how they explain the significance of the results to consumers. The rule also would require systems to explain how the monitoring was performed. This provision is not meant to require systems to give detailed explanations about laboratory methods or sampling protocols; rather, EPA expects the systems to provide some indication whether raw water or finished water was sampled and the extent of sampling. EPA requests comments about the inclusion of these data in the consumer confidence reports and the appropriate format for doing so.

When a system detects radon, the Agency is proposing that the reports must include the results of the monitoring, information on how the monitoring was performed, and an explanation of the significance of the results. EPA will provide examples in guidance of what such an explanation might be. As with Cryptosporidium, EPA does not expect detailed explanations of the sampling or laboratory methods.

When a system detects any other unregulated contaminant, the proposed rule would strongly encourage systems to determine if there is a health advisory or a proposed NPDWR for that contaminant in order to determine whether there may be a health concern which warrants inclusion of the data in the consumer confidence reports.

Note that for Cryptosporidium, radon, and any other contaminants for which monitoring is not required, the proposed rule allows systems the flexibility to present results either in the table or in another section of the report.

#### 4. Compliance With National Primary Drinking Water Regulations

Under section 1414(c)(4)(B)(iv) of SDWA as amended, consumer confidence reports must contain information on compliance with

national primary drinking water regulations, as required by the Administrator. The statute speaks in terms of "compliance," which might be interpreted to require only certification of compliance/noncompliance with the NPDWR. However, the Agency believes it is appropriate to require reporting of any violation of the standards in the regulations, with the exception of violations of MCLs, which are addressed elsewhere in the consumer confidence reports. The Agency requests comments on the need to include all NPDWR violations as listed in the 144.153(e). An alternative would be to select only these violations which could clearly result in a health risk. If this alternative is recommended by commenters, they should include a discussion of how EPA could differentiate such violations, and specific suggestions for types of violations (e.g., record-keeping) that wouldn't need to be reported.

The proposed rule further specifies that the report must contain a clear and readily understandable explanation of the violation and its health significance. EPA recognizes that for violations other than MCLs and treatment techniques, explanations of health significance will need to be fairly general (e.g., for violation of a monitoring requirement, the explanation might be "Failure to perform required monitoring may cause contaminants with potentially adverse health effects to go undetected"). Finally, the report must describe the steps the system has taken to correct the violation. A full discussion of the linkage between this proposed requirement and the public notification requirements is included in Section VI of this preamble.

#### 5. Variances and Exemptions

Section 1414(c)(4)(B)(iv) also mandates that consumer confidence reports must include "notice if the system is operating under a variance or exemption and the basis on which the variance or exemption was granted." In order to ensure that the public has an opportunity to fully understand the basis for the variance or exemption and to participate in consideration of it, the proposed rule adds a requirement that two additional items of information be included in the report. First, the report must provide the dates when the variance or exemption was issued and when it is due for renewal. Second, the report must provide a 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 for the variance or exemption. While the Agency is mindful of the importance of keeping

the consumer confidence reports brief and relatively simple, it also believes that in the case of a variance or exemption, the public is best served by a complete explanation of the situation. The Agency requests comment on an alternate requirement which would call for a "brief status report on compliance with the terms of the variance or exemption."

#### 6. Additional Information

Section 1414(c)(4)(A) requires EPA's consumer confidence report regulations to include a "brief and plainly worded explanation regarding contaminants that may reasonably be expected to be present in drinking water, including bottled water." Although the statute does not specify explicitly that reports delivered to customers of community water systems include this explanation, the Agency concluded that otherwise there would have been no function served when Congress required it to be included in the regulation. Further, section 1414(c)(4)(B) gives the Administrator the authority to require that additional information be included in the reports. The Agency is proposing therefore that such an explanation must be included in the reports.

Today's proposed rule includes three paragraphs in response to this requirement. The first explains that surface water and ground water provide the source water for both tap water and bottled water, and that both surface and ground water dissolve naturally-occurring minerals and radioactive material and can pick up substances resulting from the presence of animals or from human activity. The second paragraph provides a short description of the types of contaminants that may be present in source water. The third paragraph explains that EPA and the Food and Drug Administration prescribe regulations that limit the amount of certain contaminants in water provided by community water systems and in bottled water, respectively. As required by section 1414(c)(4)(B)(ii), it further explains that the presence of contaminants does not necessarily indicate that the water poses a health risk, and indicates that the EPA Safe Drinking Water Hotline can provide additional information about contaminants and health effects.

The NDWAC Working Group and the expert panel both debated the material at length. Some members were concerned that the language shifted the focus of the report from finished water to source water. In addition, members noted that the reports should not suggest that water can ever be completely free of contaminants,

because naturally occurring contaminants are always going to be present in some concentration. Some commenters on the language suggested that the description of potential contaminants could unnecessarily alarm customers whose water did not contain all of the described categories of contaminants. The NDWAC's recommendation was that this section of the report should be entirely optional.

EPA believes that the statute requires that the report include an explanation for the presence of contaminants and has included this requirement in § 141.153(g)(1). The Agency agrees with stakeholders that the systems should be given flexibility in the wording of the explanation. Therefore, EPA's proposal includes optional language in proposed § 141.153(g)(1)(i),(ii) and (iii) which systems may use to fulfill the requirement. Alternatively, subparagraph (iv) provides minimal language that a system may use to fulfill the requirement. Systems may also develop their own language. EPA is proposing to require that the language of subparagraph(v) be included in all reports since this language is mandated by the statute in section 1414(c)(4)(B)(vi).

#### D. Required Health Information and Rationale

All consumer confidence reports are required by today's proposed regulation to include a statement that some people may be more vulnerable to contaminants in drinking water than the general population. The statement goes on to identify several categories of persons who may be particularly at risk from infections, and encourages them to seek advice from their health providers. It further informs people that EPA/CDC Guidelines on appropriate means to lessen the risk of infection from *Cryptosporidium* may be obtained from the EPA Safe Drinking Water Hotline and provides the number, as required by the 1996 Amendments. EPA is requesting comments on the clarity and usefulness of this statement, particularly whether it is clear that only certain populations are particularly at-risk from infectious contaminants and whether the statement is appropriate for inclusion in all reports.

In addition to the health effects information that must be included in the report where there is a violation of an MCL discussed above, the rule also specifies language that must be included in the reports if the system has identified a violation of a treatment technique. This required health information for violation of the surface water treatment rule describes the

organisms that may be present in unfiltered or inadequately treated surface water, and presents information about the health effects that may result from consumption of such water. This section also addresses acrylamide and epichlorohydrin, which are impurities in chemicals used in drinking water treatment, and which are limited under treatment techniques specified by EPA. Required health effects language also must be provided in consumer confidence reports about these contaminants, if their specified treatment techniques are violated.

#### *E. Report Delivery*

The rule being proposed today tracks section 1414(c) of SDWA with respect to how the reports should be delivered to drinking water system customers. It requires one copy of the report to be mailed to each customer, unless the Governor of a State has waived the mailing requirement and the system serves fewer than 10,000 persons. Systems for whom the mailing requirements have been waived are required to publish the report in one or more local newspapers serving the area in which the system is located; inform their customers, either in the newspapers in which the reports are published or by other means approved by the state, that the report will not be mailed; and make the reports available to the public upon request. A further exception is carved out in the Statute for systems serving 500 or fewer persons for which the Governor has waived the mailing requirements. These systems may forego publication of the report in a local newspaper if they provide notice by mail, door-to-door delivery, or posting in an appropriate location that the report is available upon request.

The Agency has clarified the report delivery requirements with respect to community water systems that are in Indian Country. Under the proposed rule, Tribal Leaders can exercise the same authority as State Governors to waive the mailing requirement for systems serving fewer than 10,000 persons, if EPA finds that the tribe is eligible to be treated in the same manner as a state under section 1451 of SDWA for purposes of the authority to waive the mailing requirements for such systems contained in section 1414(c). Under section 1451 (codified at 42 U.S.C. 300j-11) the Administrator of EPA is authorized to treat Indian Tribes in the same manner as States. Under today's rule, a tribe may seek eligibility to be treated in the same manner as a state for purposes of waiving the mailing requirement either by applying as part of the Tribe's application for

primacy over the Public Water System Program or by applying separately for waiver authority. EPA is not requiring tribes to have primacy over other aspects of the Public water system Program to receive waiver authority.

Under either option, a tribe must demonstrate, using the procedures outlined in 40 CFR section 142.76, that it meets the treatment in the same manner as a state eligibility requirements contained in SDWA section 1451 and 40 CFR section 142.72: (1) federal recognition; (2) a governing body exercising substantial governmental duties and powers; (3) jurisdiction; and (4) capability. Consistent with the Agency's 1994 "Simplification Rule" which simplified the tribal eligibility process, a tribe that has been treated in the same manner as a state for purposes of another EPA program will not need to reestablish the first two criteria when applying to waiver authority. Rather, such a tribe will only need to demonstrate that it meets the jurisdictional and capability requirements. For detailed guidance on demonstrating the eligibility requirements, see 53 FR 37396, 37398-402 and 59 FR 64339-341. EPA proposes to amend CFR sections 142.72 and 142.78 to include the authority to waive the mailing requirement as a provision for which EPA is authorized to treat tribes in the same manner as states. EPA anticipates that a number of community water systems in Indian Country may be subject to this provision, and it is important for EPA to provide a mechanism by which the mailing requirement may be waived.

In areas of Indian country where EPA has not found a tribe eligible to waive the mailing requirement and no state has been explicitly approved to implement the PWS program, EPA may waive the mailing requirement of 40 CFR § 144.155(a). EPA does not believe it is appropriate to require Indian tribes to seek the authority to waive the mailing requirement because the SDWA does not require tribes to seek such authority and, while EPA has streamlined the process, seeking approval to be treated in the same manner as a state may still be a significant effort that Tribes may not wish to undertake solely to obtain the authority to waive the mailing requirement for consumer confidence reports. Yet, as noted above, EPA believes that small community water systems in Indian Country are just as likely, if not more likely to need the relief from the mailing requirement. EPA is authorized under SDWA § 1451, where it is inappropriate or administratively infeasible to treat tribes

as identical to states for a particular provision, to administer such provision in a manner that will achieve the purposes of the provision. EPA intends to exercise that authority to waive the mailing requirement for small systems in Indian Country in consultation with the Tribe to achieve the purposes of Section 1414(c) where the relevant tribe has not been approved to be treated in the same manner as a state and no state has been explicitly approved by EPA to implement the Public Water System program. EPA solicits comment on this issue.

EPA considers "Indian country" or "Indian lands" to be: (a) all land within the limits of any Indian reservation under the jurisdiction of the United States government, notwithstanding the issuance of any patent, and including rights-of-way running through the reservation, (b) all dependent Indian communities within the borders of the United States whether within the original or subsequently acquired territory thereof, and whether within or without the limits of a State, and (c) all Indian allotments, the Indian titles to which have not been extinguished, including rights-of-way running through the same. See 40 CFR § 144.3; see also 18 U.S.C. § 1151. EPA has used the term "Indian lands" in the past under SDWA, but has defined it as "Indian country" as defined under 18 U.S.C. § 1151. See 40 CFR § 144.3. To avoid confusion, EPA will use the term "Indian country" in today's proposed rule.

In the course of its public meetings concerning the form and contents of the consumer confidence report requirements, EPA was urged by some members of the public to require the reports to be distributed to all consumers of water supplied by a particular community water system, rather than only to customers of the system which is the usage in section 1414(c). Advocates of the consumer-related approach argued that, for example, residents of apartment houses, condominiums, or other similar living accommodations might not be indicated in community water system billing records as customers, and thus would not receive personal copies of the reports. Rather than relying on their own customer lists, community water systems could obtain lists of postal patrons, utilize so-called criss-cross directories, use voter lists, or in some other way obtain lists of likely consumers of their supplied water. While the Agency recognizes that sending consumer confidence reports to water system customers may not reach every person who may have consumed water from the system, it believes that

alternative approaches may be more efficient than mandated mailings to all consumers. Therefore, today's rule calls for systems to make a "good faith" effort to reach consumers who do not receive water bills, using means recommended by the Director of the State Drinking Water Program. Such means may include posting the report on the Internet, publishing it in subdivision newsletters, or asking landlords or apartment managers to post the report in a conspicuous place in their building. The Agency specifically requests comments on this issue.

Under § 141.155(b) of the rule, a community water system must send one copy of its report to the Director of the State Drinking Water Program, in States with primary enforcement authority. This provision will help to ensure that reports are prepared and distributed annually, since the report submitted to the State Director must be accompanied by a written certification that the report has been distributed to the system's customers and that the information contained in the report is correct and consistent with the compliance monitoring data previously submitted to the State. States will have the opportunity to set up State clearinghouses of consumer confidence reports, either as a State function or through a designated third party, so that interested persons could obtain copies of consumer confidence reports from those clearinghouses. At a minimum, states that do not set up a clearinghouse must maintain a list of the phone numbers of community water systems operators to assist interested persons in obtaining reports.

Section 141.155(c) of the rule requires community water systems to mail a copy of their consumer confidence report to any other agency in the State with jurisdiction over community water systems. This could include public utilities commissions, if they have jurisdiction over rate making; public health agencies, which may either have primary jurisdiction over water systems or share that jurisdiction with other agencies; State environmental agencies; and State agricultural or natural resource agencies, if they have jurisdiction over water rights, wells, or other aspects of the system's source water. This section also authorizes the State Director to designate any other agencies or clearinghouses to which he can direct copies of the report to be sent.

Section 141.155(e) specifies that all systems, regardless of size, are required to make their consumer confidence report available to the public upon request. The rule does not specify the means that systems must use, leaving

them free to mail copies of reports, send them by telefax, or place copies on an Internet site. However, EPA believes that the means chosen must be practical from the standpoint of all potential persons requesting copies of the report. Thus, placing a copy of the report on the Internet but refusing to mail a copy to a person without Internet access would be contrary to the intent of this provision of the rule. The Agency is also interested in getting comments from States on their ability or interest in placing reports on the Internet to simplify access to the reports for the general public.

Today's rule does not require that the report be delivered in languages other than English. However, § 141.153, discussed above, does require systems in communities with a large proportion of non-English speaking residents to include information in the appropriate language in their reports regarding the importance of the report or to offer additional information in that language.

EPA has been encouraged to require posting of the consumer confidence reports on the Internet. However, the Agency is uncertain whether all community water systems possess the necessary means to set up and maintain an Internet site or, in some case, even to access the Internet; and whether community water system customers would find such posting to be useful. Therefore, the Agency is requesting comments on this subject, as described below.

#### *F. Special State Implementation and Primacy Requirements, and Rationale*

As discussed in Section III.B., EPA is proposing that existing systems must deliver an initial report to customers within 14 months of the publication of the final rule in the **Federal Register**. New systems must deliver an initial report within 18 months after beginning water delivery service. See proposed section 141.152. Since EPA considers implementation of this rule to be a requirement for a State to obtain or maintain primary enforcement responsibility under SDWA Section 1413, each State with primacy must adopt the requirements of this Subpart (40 CFR 141 Subpart O) no later than two years after the final rule is published in the **Federal Register**. See proposed section 142.16(f). As a result, within several years, all primacy States should have primary responsibility for implementation of this rule. During any time period that this rule is effective but that a State does not have either interim or final primary enforcement responsibility for this rule, EPA will

implement this rule directly in that State.

EPA is proposing that primacy States may adopt alternative requirements concerning the form and content of these reports through notice and comment rulemaking. EPA is proposing that the alternative requirements provide the same type and amount of information as required by the Federal regulations. Under the SDWA, a State in order to maintain primacy must adopt requirements which are no less stringent than the Federal regulations. In the case of consumer confidence reports, EPA is proposing to interpret stringency as type and amount of information. State members of the Working Group were concerned that this interpretation would limit the authority given to the states by Congress to develop alternative requirements with respect to form and content of the reports. EPA notes that this proposal contains few requirements not specifically mandated by the Statute. However, the Statute provides that the content of the report as prescribed by EPA's regulations need not be limited to the statutory elements. EPA has exercised this discretion in a few instances. For example, the rule would require information on the source of detected contaminant, and a warning on infectious agents. The Agency's interpretation of stringency would require state regulations to include the provisions for information on contaminant sources and the health warning to susceptible populations. EPA is requesting comments on whether any information beyond that specifically required by the Statute should be mandatory for inclusion in state regulations. Under the proposed rule, States already would have flexibility in specifying how the required information is presented. For example, definitions of terms, choice of units for the MCLs, or health effect language could be altered by the states. These changes would have to be approved by EPA in the context of primacy revisions.

The proposed rule contains a requirement that each State with primary enforcement authority make consumer confidence reports submitted to it available to the public upon request or maintain a list of telephone numbers for operators of community water systems that could be used by the public to request copies of reports directly from the water systems. Representatives from States expressed concern over the lack of resources in some states to serve as a central distribution point for the reports, and asserted that neither requirement was necessary, since States already maintain telephone numbers for the systems in the State, and State

Freedom of Information procedures are available if necessary to obtain access to documents held by the State. The Agency is requesting comments on whether either requirement should be incorporated into the regulation.

#### *G. Health Effect Language and Rationale*

The SDWA Amendments require EPA to develop and include in the consumer confidence report regulations "brief statements in plain language regarding the health concerns that resulted in regulation of each regulated contaminant." These statements are provided for use by community water systems in their reports as language that EPA believes accurately describes those health concerns that customers of the water system might appropriately have if they consume water containing contaminants at concentrations above the MCL.

The Agency has placed the brief statements on health concerns in an appendix to the regulations, because most community systems are in compliance with the regulations and will not need to refer to this language. However, the Agency considers the language of the statements to be mandatory for use in the consumer confidence reports, unless individual states choose to alter the language for their own regulations.

EPA examined a number of sources that could be used as the basis for the brief statements on health concerns, and held extensive discussions with the NDWAC working group and with its expert panel on the topic. The two groups looked primarily at the language developed by EPA for public notification purposes, (§ 141.32) which emphasizes how the MCLs were developed, and EPA's contaminant-specific fact sheets, which EPA distributes through the SDWA Hotline. The fact sheets convey more information on expected health effects on humans. In general, the language in Appendix B being proposed today is a distillation of information contained in EPA fact sheets which are included in the docket for this rulemaking.

The expert panel urged EPA to avoid scientific jargon in preparing the brief statements. The panel also stressed the importance of communicating effectively that MCLs are set using a conservative approach. Some members of the expert panel also stated that exceedance of an MCL does not necessarily lead to health effects. EPA believes that the proposed language conveys appropriate risk information by indicating that chronic adverse health effects "could" result from exposures "in excess" or "well in excess" of the

MCL "over many years." In cases where human or animal exposure to high doses have indicated that a contaminant is a possible carcinogen, the language indicates that people who drink water containing the contaminant at levels above the MCL over many years "may have an increased risk of getting cancer." EPA believes that the proposed health effects language accurately conveys what is known about the risk from these contaminants, but is sensitive to the concern that some water system customers may interpret the language as indicating a significantly higher level of incremental risk than would actually result from exposures at the levels that are likely to occur. EPA is thus seeking comment on whether there are other ways to communicate to water system customers the degree of health risk they may face as a result of MCL violations.

The expert panel further recommended that the statements indicate whether human or animal studies formed the basis for identifying adverse health effects. However, EPA is not sure whether this information is useful to most customers in evaluating the health significance of MCL violations, and is mindful of the need to keep the language brief and easy to understand. Thus, the proposed language does not indicate whether the potential health effects were identified through human or animal studies. EPA is requesting comment on this issue.

More generally, EPA is requesting comments on whether the proposed language accurately summarizes the health concerns associated with each contaminant, whether the proposed language accurately reflects the risk assessments and health analyses underlying the regulations of each contaminant and whether the language adequately informs consumers of relevant health effects. EPA requests commenters to provide alternative health effects language and the rationale for such alternative language. The Agency itself will continue to explore the adequacy of the proposed health effects language for accurately and appropriately communicating information about risk. EPA also requests comments on the fact sheets and their accuracy in summarizing the health effects of regulated contaminants and whether, as an alternative to the language of Appendix B, systems should be allowed to simply enclose an approved EPA fact sheet to provide health effects information.

EPA is particularly interested in the language proposed for contaminants which present a special risk to pregnant women or children. Several

stakeholders have advocated requiring all consumer confidence reports to include language alerting consumers to the dangers posed to pregnant women and children by certain contaminants. For example, nitrate, lead, and certain non-specified pesticides have been identified as possibilities for general information on risk. The Agency believes that inclusion of such a warning in all reports may not be warranted but plans to reconsider this issue for the final rule and is requesting comments on appropriate courses of action. The Agency notes that the MCL for nitrates and the action level for lead have been established at levels protective of these at-risk populations. The health effects language included in Appendix B reflects the special risk that these contaminants may cause. Most importantly, EPA's public notification regulations require immediate notification and explanation of health effects for violations of these standards, including impacts on pregnant women and children. EPA does not believe that the consumer confidence reports are adequate for addressing these risks because they will not generally be received soon enough. Nevertheless, violations of these standards will also be included in the reports. EPA is specifically requesting comments on the language in Appendix B. With regard to pesticides and other contaminants EPA is interested in information and data that commenters may have on the need for a special warning for pregnant women and children. EPA requests that commenters submit such information and data to the agency. EPA is also requesting comments on health effect language to be included in the consumer confidence reports for 3 regulated contaminants detected below the MCL (see Section IV.1 of this preamble). Commenters are also invited to consider this issue within the context of their response to the comments requested in Section IV.1.

Issues regarding the linkage between the language of Appendix B and the public notification requirements are discussed in Section VI of this preamble.

#### **IV. Additional Requests for Public Comments**

Throughout the preceding exposition, EPA has requested comment on various issues. Following are two more issues which did not fit cleanly into the discussion above and on which EPA would appreciate specific suggestions and comments.

**1. Health Information on Additional Contaminants**

The 1996 Amendments authorize the Administrator to require language describing health concerns to be included in reports for "not more than 3 regulated contaminants" other than those detected at levels above the MCL. This provision was discussed at length during the working group meetings. Some members of the NDWAC working group strongly encouraged the Agency to require health effect information for total trihalomethanes (TTHMs), nitrate, and arsenic, even if they were not detected at levels above their respective MCLs, because of their question concerning the protectiveness of the MCLs. Other commenters argued that providing health effects descriptions for chemicals detected at concentrations below their MCLs would be confusing to report recipients. The NDWAC recommended that the Administrator not avail herself of this authority at this time.

The Agency believes that it is important to use the authority provided by the statute in a judicious manner. Therefore it is requesting comments on the following alternatives, any of which may be included in the final rule.

One option would be to require health effects language whenever a regulated contaminant, for which EPA has proposed to lower the MCL or promulgated a revised MCL for which the effective date has not yet occurred, is detected at a level above the lower level. The immediate impact of this option would be that systems which detect TTHMs above the proposed revised MCL of 80 mg/l would have to include the language of Appendix B describing the health effects of TTHMs in their reports. The Agency would then consider, as it proposes additional revised MCLs, whether health effect language for these contaminants should be included in the consumer confidence reports. These possible inclusions would be discussed in the preamble to these future rulemakings and, where appropriate, a direct final rule could be issued to require their inclusion in the reports prior to the promulgation of the new standard. A likely candidate for future requirements under this scheme would be arsenic.

Another option would be to select 3 carcinogens for which the MCL allows a risk level in the range of  $10^{-4}$  to  $10^{-5}$ . Candidates on this list include:

Contaminant	Risk level
Chlordane .....	$7 \times 10^{-5}$
1,2-Dichloropropane .....	$1 \times 10^{-5}$
Ethylene dibromide .....	$1.25 \times 10^{-4}$
PCBs .....	$1 \times 10^{-4}$
Dichloromethane .....	$1 \times 10^{-5}$
Dioxin .....	$1.3 \times 10^{-4}$
Hexachlorobenzene .....	$5 \times 10^{-5}$
PAHs .....	$1 \times 10^{-5}$

The Agency is requesting comments on which of these contaminants would be the most significant from a health standpoint if detected in the finished water. The Agency could rank these contaminants and systems would have to report their top three detects or select 3 contaminants outright. The Agency is also requesting comments on whether it should select a threshold for these contaminants such as detection of 50% or greater of the MCL below which no health effect language would be necessary.

**2. Linkage With the Public Notification Requirements**

EPA is currently revising its requirements for public notification. A water supplier triggers these requirements when it fails to comply with a MCL, treatment technique, or other NPDWR (i.e., monitoring and treatment procedures), or is subject to a variance or exemption under section 1415. Current regulations [40 CFR 141.32] require public notification:

- by electronic media within 72 hours if the violation represents an acute health risk;
- by newspaper within two weeks and by mail within 45 days if the water system violates a MCL or treatment technique; and
- by mail and newspaper within 90 days if the water system violates a monitoring or testing standard.

Under the 1996 SDWA Amendments, EPA must revise these standards so that consumers receive quicker notification in the event of a possible acute health risk, and so that water suppliers have more time (up to one year) to notify customers of violations with less immediate effects. The statutory requirements for these revisions would allow water systems to incorporate their reporting on less serious violations: (I) in the first bill (if any) prepared after the date of the occurrence of the violation, (II) in an annual report issued not later than 1 year after the date of the occurrence of the violation, or (III) by mail or direct delivery as soon as practicable, but not later than 1 year after the occurrence of the violation [section 1414(c)(2)(D)(i)].

The option exists for a linkage between the rule proposed today and those that EPA will revise for public notification. EPA recognizes that the inclusion of some public notice elements in annual consumer confidence reports could mean a significant savings of time and resources for some water systems, and is mindful of its responsibility under the Paperwork Reduction Act to avoid unnecessarily duplicative reporting requirements. On the other hand, EPA does not want to minimize the seriousness of any violation, and believes that it is essential that consumers know if and when their water supplier has failed to comply with drinking water regulations.

In trying to balance the issues noted above, EPA requests public comment on the following issues.

Regarding violations of MCLs, action levels, and treatment techniques, the Agency realizes that today's rule would duplicate the current public notification requirements by requiring inclusion of essentially the same information as is currently required in § 141.32(d) with the exception of the health effect language. The proposed rule would require a clear and readily understandable explanation of the violation, any potential adverse health effects, and the steps the system has taken to correct the violation. This could be helpful to consumers who might have overlooked or forgotten about the regular public notification. One issue on which EPA is specifically requesting comment is whether this health effect language would be appropriate for public notification requirements, since having a single set of health effects explanations would facilitate integration of the two rules. The Agency notes that when members of the working group discussed the health effect language they did not discuss it in that context. Under the current regulations any of these violations would have already been reported to the public and the consumer confidence reports were envisioned as a reminder of what customers had already been told. Further the working group was mindful of the limited amount of information which could be included in consumer confidence reports on any specific issue. However, EPA has started the process of revising the public notification requirements pursuant to the 1996 Amendments to the SDWA and this issue has been raised. Therefore, EPA requests comments on the following options:

As this rule is promulgated the Agency would replace the health effect language in § 141.32 with the language

Contaminant	Risk level
Carbon tetrachloride .....	$2 \times 10^{-5}$
1,2-Dichloroethane .....	$1 \times 10^{-5}$
Vinyl chloride .....	$1 \times 10^{-4}$

proposed in Appendix B of today's proposal so that the same language would be included in consumer confidence reports and public notifications.

The Agency would not modify the public notification language until it promulgated revised regulations for public notification but the language proposed today would form the core of the public notification language and be expanded as seen fit for the purpose of public notification.

Today's proposal is similarly redundant with the current public notification requirements for violations of other NPDWRs (such as monitoring and reporting). A less redundant alternative would allow water systems to simply note a violation of an NPDWR and to attach to their consumer confidence report a copy of the notice issued at the time of the violation.

Finally, since SDWA allows public notice for less serious violations within one year, there might be some violations which systems would need to report exclusively in the consumer confidence report. These could even include MCL violations for some contaminants with strictly chronic health effects. This would allow community water systems to put out fewer mailings. Besides saving resources, a reduced number of mailings might encourage consumers to read those notices that they do receive. This option however would only be available to community water systems.

Non-community water systems who are not subject to these requirements would have to issue a public notification for all violations.

If water suppliers were to report certain violations only in the consumer confidence report, EPA would add language along the following lines to the proposed regulation:

—[at § 141.153(d)(4)(ii)] If the report is used to satisfy the requirements of section 1414(c)(2)(D) of SDWA, the report must include information on [a subset to be determined of] violations which have occurred within the last 12 months.

—[at § 141.155(d)] Except when the report is used to satisfy the requirement of section 1414(c)(2)(D) of SDWA, the Governor of a State or the Tribal Leader can waive the mailing requirement of § 144.155(a) for community water systems serving fewer than 10,000 persons.

The Agency is requesting comments on this option. Particularly the Agency would welcome input on violations which systems could appropriately report exclusively in the consumer confidence reports. These comments will be used to inform both this rulemaking and the public notification revisions rulemaking.

#### V. Cost of Rule

EPA has estimated the costs of complying with the requirements of the

proposed rule in terms of fixed costs and variable costs. Fixed costs include those costs that a community water system must incur to comply with the requirements regardless of how many copies of the report it must deliver. These costs include the costs associated with reviewing the regulations, collecting data regarding monitoring results and MCL violations, preparing the technical content of the consumer confidence report in a format suitable for distribution, identifying the recipients of the reports, and providing instructions about report production. Variable costs are costs that increase or decrease along with the number of consumer confidence reports to be delivered. These costs include costs of producing the reports (costs of paper, photocopying or printing, and labels), and inserting the reports in bills or otherwise delivering them. Based on its analysis, the Agency estimates the total fixed and variable annualized cost of delivering a report to every customer served by all community water systems nationally (except for California, which already requires notices similar to the consumer confidence reports required by the proposed rule) is \$20,286,113. This includes \$7,295,575 in fixed costs and \$12,990,538 in variable costs. Table V.1 gives a breakdown of costs by system size and also shows state and federal costs.

BILLING CODE 6560-50-P

Table V.I

Summary Table (dollar figures rounded)	Number of Systems	Average Labor Hours Per System	Average Labor Cost Per System	Other Costs per System (e.g., postage)	Total Cost for Size Category
Systems serving ≤ 500	27,135	4.9	\$49	\$1	\$1,366,247
Systems serving 501-1,000	6,294	13.5	\$135	\$160	\$1,851,588
Systems serving 1,001-3,300	6,689	13.5	\$135	\$268	\$2,692,990
Systems serving 3301-10,000	3,882	19.5	\$468	\$816	\$4,985,822
Systems serving 10,001-50,000	2,319	24.6	\$788	\$2,301	\$7,162,556
Systems serving >50,000	721	24.6	\$788	\$2,301	\$2,226,909
Total System Cost					\$20,286,113
Total State or Direct Implementation Primacy Agency Cost					\$2,784,692
Total	47,040				\$23,070,805

For more information about the costs of the rule and how EPA estimated them, see the Regulatory Flexibility Screening Analysis and the Supporting Statement for the EPA Information Collection Request (ICR #1832.01) that EPA submitted for OMB approval under the Paperwork Reduction Act. EPA is requesting comment on its cost estimates and methodology.

## VI. 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 Office of Management and Budget (OMB) review and the requirements of the Executive Order. The Order defines "significant regulatory action" as one that is likely to result in a rule that may:

(1) Have an annual effect on the economy of \$100 million or more, or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities;

(2) Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;

(3) Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of the recipients thereof; or

(4) Raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order.

It has been determined that this rule is a "significant regulatory action" because it may raise novel legal or policy issues. The rule represents the first time that water systems will be required to submit important information to customers regarding the quality of their drinking water on a routine basis. Therefore, EPA submitted this action to OMB for review. Substantive changes made in response to OMB suggestions or recommendations will be documented in the public record.

### B. Regulatory Flexibility Act

#### 1. General

The Regulatory Flexibility Act (RFA), as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA), requires EPA to consider explicitly the effect of proposed regulations on small entities. The Agency assesses the impact of the proposed rule on small entities and considers regulatory alternatives if a

rule has a significant economic impact on a substantial number of small entities. Under the RFA, 5 U.S.C. 601 *et seq.*, an agency must prepare an initial regulatory flexibility analysis (IRFA) describing the economic impact of a rule 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 an IRFA.

EPA has determined that this proposed rule will affect small water utilities, since it is applicable to all community water systems, including small systems. However, EPA has estimated the impact of the proposed rule and concluded that the impact of the rule will not be significant. Therefore, the Administrator is today certifying, pursuant to section 605(b) of the RFA, that this proposed rule will not have a significant economic impact on a substantial number of small entities. The basis for this certification is as follows: the annualized compliance costs of the rule represent less than 1% of sales for small businesses and less than 1% of revenues for small governments. No small not-for-profit enterprises were identified as community water systems. 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. This is the cut-off level specified by Congress in this provision for small system flexibility in delivery of the reports. Because this does not correspond to the definition established under the RFA, EPA has consulted with the Small Business Administration (SBA) on the use of this alternative definition (see next section). Further information supporting this certification is available in the public docket for this rule.

Since the Administrator is certifying this rule, the Agency did not prepare an IRFA. 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 community water systems in the design of consumer confidence reports; offering them the choice to use a simplified format to prepare the reports; incorporating procedures by which small systems can make reports available to their customers by methods other than mailing; and by limiting the absolute requirement for distribution of reports to water system customers rather

than consumers. Further the Agency notes that in general the regulations issued under SDWA place a lesser burden on small systems, for example, the TTHM and information collection rules do not apply to small systems. For most regulated contaminants, small systems have to collect fewer samples. Therefore the small systems operators will have significantly less information to report in consumer confidence reports.

#### 2. Use of Alternative Definition

As explained above, for this assessment of impact on small entities, EPA has defined a small entity as a public water system (PWS) that serves 10,000 or fewer persons. PWSs affected by this proposal would include PWSs owned and operated by governmental jurisdictions as well as those that are privately owned. As indicated above, there are no PWSs owned by not-for-profit organizations.

EPA proposes to define "small entity" for purposes of its regulatory flexibility assessments under the RFA for all future drinking water regulations in the same way. By using this definition for the regulatory flexibility assessments, EPA will better reflect the realities of the drinking water industry. Furthermore, this definition is consistent with specific direction from Congress in several provisions of the 1996 amendments that provide relief from regulatory requirements for PWSs serving 10,000 or fewer people.

As previously described, the RFA requires an agency, whenever it publishes a notice of general rulemaking, to prepare a regulatory flexibility analysis that describes the impact of a rule on small entities unless the agency certifies that the rule will not have a significant impact on a substantial number of small entities. 5 U.S.C. §§ 603(a), 604(a) and 605(b). Under the RFA, the term "small entity" means "small business," "small governmental jurisdiction" and "small organization." These terms are further defined by the Act.

In the case of a "small business," the term has the same meaning as a "small business concern" under section 3 of the Small Business Act. "Small governmental jurisdiction" means the government of cities, counties, towns and villages, among others, with a population of less than 50,000. A "small organization" is any not-for-profit enterprise that is independently owned and operated. 5 U.S.C. § 601 (3), (4) & (5).

The RFA authorizes an agency to establish an alternative definition for these terms after an opportunity for

public comment. Additionally, in the case of an alternative definition of "small business," an agency must consult with the Office of Advocacy of the Small Business Administration (SBA) concerning such alternative definition.

EPA is today asking for public comment on its intention to define "small business," "small organization," and "small governmental jurisdiction" for purposes of the regulatory flexibility assessments for its drinking water regulations as a PWS serving 10,000 or fewer people. The Agency has consulted with the SBA Office of Advocacy. The Office of Advocacy agreed with the Agency's choice of systems serving less than 10,000 persons for an alternative small business definition for this rulemaking, and plans to revisit this issue with EPA in future rulemakings under SDWA.

The following provides additional explanation why the Agency proposes to use a different definition from that which would generally be applicable under the RFA.

The alternate definition will focus the Agency's regulatory flexibility analysis on those PWS most likely to experience an economic hardship associated with complying with new drinking water regulations to be proposed under the Safe Drinking Water Act (SDWA). There are several compelling factual, statutory and programmatic reasons to support the proposed definition.

SBA has by regulation defined small business concerns. SBA regulations typically define a small business in terms of either total revenues or total employees. Under SBA's definition, a "small," privately-owned water utility would be one with revenues of less than \$5,000,000. Using this definition, "small" privately-owned water systems would include systems that serve up to approximately 40,000 people. Ninety-eight percent of PWSs serve populations of 10,000 or fewer. The average annual revenue for a system in this class size is less than \$600,000.

The Agency has concluded that defining a "small entity" for RFA purposes as a PWS that serve 10,000 or fewer persons is both more reflective of the small water systems in the water supply industry and will provide a more meaningful analysis of those entities likely to have the most significant economic impacts as a result of drinking water regulations. It is the EPA's view that a population of 40,000 or fewer (or a private PWS with annual revenue of \$5,000,000 or less) is not an appropriate criterion under the drinking water program for differentiating private small entities from larger ones. Using such a

yardstick would not distinguish PWSs that have stronger technical expertise and revenue sources from those that do not. Using data from EPA's Community Water Supply Survey, a private community water system with revenues of \$5 million would correspond to a system that serves more than 40,000 people. By contrast, community water systems that serve between 3,300 and 10,000 have a median revenue of \$605,000. As a result, EPA believes it is reasonable to conclude that in virtually all circumstances, systems that serve 10,000 or fewer people have annual revenues well below \$5 million. Given the economies of scale, the per family cost of system compliance with national drinking water regulations will be higher for systems serving populations of 10,000 or fewer because a smaller group of people will be paying for an inelastic set of regulatory requirements. Thus, the proposed definition will focus the Agency's resources on the needs and concerns of the systems that really need the assistance.

In addition to the fact that the proposed alternative definition of "small business" better reflects the reality of this industry, the definition is consistent both with Congressional direction for relief to small systems as well as EPA's historic regulatory practice. As part of the 1996 Safe Drinking Water Act Amendments, Congress expressly addressed the issue of small system size. Reflecting the same concerns that underlie the RFA, Congress recognized that PWSs below a certain size may have greater difficulty, for economic and technical reasons, in complying with the public health provisions of the SDWA than larger systems. Consequently, the 1996 amendments specifically provide that for systems serving under 10,000, the Administrator may allow alternative treatment technologies, modified monitoring schedules, and variances from maximum contaminant levels. Congress also provided that the Administrator may consider additional flexibility for systems that serve 3,300 people or fewer. Specifically, the Administrator may grant extensions of temporary exemptions from compliance with specific drinking water standards so long as the exemption does not result in an unreasonable risk to health. And, as discussed previously, the SDWA provisions on which this proposed rule are based provide still an additional level of flexibility in the report distribution requirements to systems serving 500 or fewer persons.

EPA has historically recognized that smaller systems have financial and technical difficulty in meeting Federal

drinking water standards. As a result of this concern, the Agency's regulations have in some cases treated systems serving 10,000 or fewer customers differently. For example, in 1979, EPA issued regulations for one group of disinfection by-products (total trihalomethanes or TTHM) that exempted systems serving 10,000 or fewer persons. In 1994, EPA proposed the Stage 1 Disinfection/Disinfection By-Products rule, that provided systems serving 10,000 or fewer with at least 24 months longer than larger system to comply with the regulation depending on the system type. EPA routinely evaluates the economic impacts of a proposed drinking water regulation on public water systems (both publicly and privately owned) serving 10,000 or fewer people. EPA has specifically focused on this subgroup in the Disinfection Byproducts Stage 1, the Interim Enhanced Surface Water Treatment Rule and the Total Coliform Rule.

The Agency will be proposing a number of regulations over the next five years to meet its new SDWA obligations. The use of a single definition for purposes of the regulatory impact analysis for small business, small governmental jurisdiction, and small organization should decrease confusion for the regulated community and facilitate communication.

The Agency is interested in receiving comments on the use of this alternative definition of small entity.

### *C. Paperwork Reduction Act*

The information collection requirements in this rule have been submitted for approval to 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. 1832.01) and a copy may be obtained from Sandy Farmer, OPPE Regulatory Information Division, U.S. Environmental Protection Agency (2137), 401 M Street SW, Washington, DC 20460 or by calling (202) 260-2740. The information collection 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 of 1996 (Public Law 104-182) enacted August 6, 1996. Responses are mandatory.

The burden to the regulated community is based on the cost of the rule discussed under section V. The burden to community water systems is 459,505 hours at an annual cost of \$20,286,113. The estimated number of

respondents is 47,040 community water systems. The frequency of responses is annual. The average burden per response is 9.5 hours. For additional information on burden to water systems by size category, see Table V.1 above. The annual burden to EPA and state primacy agencies over three years is based on 3 elements: preparing reports for some small community water systems, receiving and reviewing reports, and filing reports. EPA estimates the annual burden incurred by implementing agencies for activities associated with the proposed regulations to be approximately 98,230 hours at an annual cost of \$2,784,692.

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.

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, OPPE 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 1832.01 in any correspondence.

#### *D. Enhancing the Intergovernmental Partnership*

Executive Order 12875, "Enhancing Intergovernmental Partnerships," October 26, 1993, requires EPA to

consult with State, tribal, and local entities in the development of rules that will affect them, and to document for OMB review the issues raised and how the issues were addressed. As described in Section II of the Supplementary Information above, EPA held extensive meetings with a wide variety of State, tribal, and local representatives, who provided meaningful and timely input in the development of the proposed rule. Summaries of the meetings have been included in the public docket for this rulemaking.

#### *E. 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, 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.

Because this rule is not estimated to impose annual costs of \$100 million or more on State, local, and tribal governments, or on the private sector, EPA is not required to prepare an

unfunded mandate statement. This rule will establish requirements that affect small community water systems. EPA does not believe at this time that these requirements will significantly affect the systems or the governments that operate them. However, EPA is requesting comment on the issue. The Agency has already consulted with representatives of small governments that may be affected by the rule and will continue to do so prior to promulgation of the final rule. If EPA determines that the requirements may significantly or uniquely affect small governments, including tribal governments, the Agency will prepare a small government agency plan as required.

#### *F. 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 two of today's proposed requirements will be particularly beneficial to these communities. One is that community water systems must include information in language other than English if a significant number of the population does not speak English. The other is that systems must make a good faith effort to reach consumers who are not bill paying customers.

#### *G. Risk to Children Analysis*

Under the Executive Order entitled "Protection of Children from Environmental Risks and Safety Risks," dated April 21, 1997, EPA must ensure that its policies, programs, activities, and standards address environmental and safety risks to children. Every regulatory action submitted to OMB for review under Executive Order 12866 must include information that evaluates the environmental health and safety effects of the planned regulation on children and explains why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the Agency.

The proposed regulation on consumer confidence reports addresses risks to children from contaminants in drinking water. The health effects language provided in Appendix B of the proposed rule identifies risks to infants and children from drinking water containing lead, nitrate, or nitrite in excess of specified levels. EPA is specifically requesting comments on this language and solicits information that could lead to inclusion of similar language for

violations of other contaminants particularly pesticides.

#### H. National Technology Transfer and Advancement Act

Under section 12(d) of the National Technology Transfer and Advancement Act, the Agency is required to use voluntary consensus standards in its regulatory and procurement 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.) which are developed or adopted by voluntary consensus standard bodies. Where available and potentially applicable voluntary consensus standards are not used by EPA, the Act requires the Agency to provide Congress, through the Office of Management and Budget, an explanation of the reasons for not using such standards. Because this proposal does not involve or require the use of any technical standards, EPA does not believe that this Act is applicable to this rule. Moreover, EPA is unaware of any voluntary consensus standards relevant to this rulemaking. Therefore, even if the Act were applicable to this kind of rulemaking, EPA does not believe that there are any "available or potentially applicable" voluntary consensus standards.

#### List of Subjects in 40 CFR Parts 141 and 142

Environmental protection, Administrative practice and procedure, Chemicals, Indian-lands, Intergovernmental relations, Radiation protection, Reporting and recordkeeping requirements, Water supply.

Dated: February 10, 1998.

**Carol W. Browner,**  
Administrator.

For the reasons set out in the preamble, the Environmental Protection Agency proposes to amend 40 CFR parts 141 and 142 as follows:

#### PART 141—NATIONAL PRIMARY DRINKING WATER REGULATIONS

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

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

2. Subpart O is proposed to be added to read as follows:

#### Subpart O—Consumer Confidence Reports

Sec.  
141.151 Purpose and applicability of this subpart.  
141.152 Effective dates.  
141.153 Content of the reports.  
141.154 Required health information.  
141.155 Report delivery.  
Appendix A to Subpart O of Part 141—Regulated Contaminants  
Appendix B to Subpart O of Part 141—Health Effect Language

#### Subpart O—Consumer Confidence Reports

##### § 141.151 Purpose and applicability of this subpart.

(a) This subpart establishes the minimum requirements for the content of annual reports that community water systems must deliver to their customers. These reports must contain information on the quality of the water delivered by the systems and characterize the risks (if any) from exposure to contaminants in the drinking water in an accurate and understandable manner.

(b) Notwithstanding the provisions of § 141.3, this subpart applies only to community water systems.

(c) For the purpose of this subpart, customers are defined as billing units or hook-ups to which water is delivered by a community water system.

(d) A State that has primary enforcement responsibility may adopt by rule, after notice and comment, alternative requirements for the form and content of the reports. The alternative requirements must provide the same type and amount of information as required by §§ 141.153 and 141.154.

##### § 141.152 Effective dates.

(a) The Regulations in this Subpart shall take effect on [date 30 days after publication of final rule in the **Federal Register**].

(b) Existing community water systems must deliver the first report by [date 14 months after publication of final rule in the **Federal Register**] and annually thereafter.

(c) New community water systems must deliver their first report within 18 months of the date they begin delivering water to customers and annually thereafter.

##### § 141.153 Content of the reports.

(a) Each community water system must provide to its customers an annual report that contains the information specified in this section and § 141.154.

(b) *Information on the source of the water delivered.* (1) Each report must identify the source(s) of the water delivered by the community water system by providing information on:

(i) The type of the water: e.g. surface water, groundwater; and  
(ii) The commonly used name (if any) and location of the body (or bodies) of water.

(2) If a source water assessment has been completed, the report must notify consumers of the availability of this information and the means to obtain it.

(c) *Definitions.* (1) Each report must include the following definitions:

(i) *Maximum Contaminant Level Goal or MCLG:* The level of a contaminant in drinking water below which there is no known or expected risk to health.

(ii) *Maximum Contaminant Level or MCL:* The highest level of a contaminant that is allowed in drinking water.

(2) A report for a community water system which has been granted a variance or an exemption must include the following definition:

*Variances and Exemptions:* State permission not to meet an MCL or a treatment technique under certain conditions.

(3) A report which contains data on a contaminant for which EPA has set a treatment technique or an action level must include the following definitions:

(i) *Treatment Technique:* A required process intended to reduce the level of a contaminant in drinking water.

(ii) *Action Level:* The concentration of a contaminant which triggers treatment or other requirement which a water system must follow.

(d) *Level of detected contaminants.* (1) Each report must contain relevant information to provide customers with an accurate picture of the level of contaminants they may have been exposed to during the year taking into account such factors as seasonal variations that produce changes in water quality.

(2) The first report must identify the 12-month period during which the data was collected. Each report thereafter must cover and identify a successive 12-month period.

(3) Each report must contain a discrete table depicting the data specified below. Any additional monitoring results which a community water system chooses to include in its report must be displayed separately.

(i) The data must be derived from data collected to comply with EPA and State monitoring and analytical requirements for:

(A) contaminants subject to an MCL, action level or treatment technique (regulated contaminants);

(B) any other contaminant for which monitoring is required by § 141.40 (unregulated contaminants); and

(C) monitoring for disinfection by-products or microbiological

contaminants as required by §§ 141.140 and 141.142, except as provided under paragraph (d)(4) of this section.

(ii) Where a system is allowed to monitor for certain contaminants less often than once a year, the report must include the results and date of the most recent sampling and a brief explanation for why the sample was not taken within the 12-month period covered by the report.

(iii) For detected regulated contaminants (listed in Appendix A to this subpart), the table must contain:

(A) The MCL for that contaminant expressed in whole numbers (such as those in Appendix A to this subpart);

(B) The MCLG for that contaminant expressed in the same units;

(C) If there is no MCL for a detected contaminant, the table must note whether there is a treatment technique or specify the action level applicable to that contaminant, and the report must include the definitions for treatment technique and action level specified in paragraph (c)(3) of this section;

(D) The highest contaminant level used to determine compliance with an NPDWR. This may be either an individual reading or an average, depending on compliance monitoring requirements for the contaminant. The table must clearly identify MCLs for which compliance is based on an average and explain what that means. When an MCL is based on a system-wide average and more than 10 percent of the customers are exposed to a level of contaminant which is consistently higher than the MCL, the report must contain information regarding the magnitude of exposure and the location of the exposed population.

(E) The likely source(s) for the contaminant. If the operator is not certain of the specific source of a contaminant, the reports must include the typical sources for that contaminant listed in Appendix A to this subpart.

(F) If a community water system distributes water to its customers from several raw sources and the sources are not blended, the table should contain a separate column for each service area and the report should identify the service area for each entry point.

(iv) The table must clearly identify regulated contaminants detected in violation of a MCL or exceeding an action level, and the report must contain a clear and readily understandable explanation of the violation including: the length of the violation, the potential adverse health effects, and actions taken by the system to address the violation. To describe the potential health effects the system must use the relevant language of Appendix B to this subpart.

(v) For detected unregulated contaminants for which monitoring is required, (except *Cryptosporidium*) the table must contain the highest level at which the contaminant was detected. The reports may include a brief explanation of the reasons for monitoring for unregulated contaminants.

(4) If the system has performed any monitoring for *Cryptosporidium*, including monitoring performed to satisfy the requirements of § 141.142, which indicates that *Cryptosporidium* may be present in the source water or the finished water, the report must include:

(i) A summary of the results of the monitoring;

(ii) Information on how the monitoring was performed; and

(iii) An explanation of the significance of the results.

(5) If the system has performed any monitoring for radon which indicates that radon may be present in the finished water, the report must include:

(i) the results of the monitoring;

(ii) information on how the monitoring was performed; and

(iii) an explanation of the significance of the results.

(6) If the system has performed additional monitoring which indicates the presence of other contaminants in the finished water, EPA strongly encourages systems to report any results which may indicate a health concern. To determine if results may indicate a health concern, EPA recommends that systems find out if EPA has proposed an NPDWR or issued a health advisory for that contaminant by calling the Safe Drinking Water Hotline (800-426-4791). EPA considers detects above a proposed MCL or health advisory level to indicate possible health concerns. For such contaminants, EPA recommends that the report include:

(i) The results of the monitoring; and

(ii) An explanation of the significance of the results noting the existence of a health advisory or a proposed regulation.

(e) *Compliance with NPDWR*. In addition to the requirements of § 141.153(d)(3)(iv), the report must:

(1) Note any violation of the following requirements:

(i) Monitoring and reporting;

(ii) Treatment techniques;

(A) Filtration and disinfection;

(B) Lead and copper control requirements;

(C) Treatment techniques for Acrylamide and Epichlorohydrin;

(iii) Record keeping;

(iv) Special monitoring requirements; and

(v) Violation of the terms of a variance, an exemption, or an administrative or judicial order; and

(2) Include a clear and readily understandable explanation of the violation, any potential adverse health effects, and the steps the system has taken to correct the violation. For a violation of a treatment technique, the report must include the relevant health effect language of § 141.154(c).

(f) *Variances and exemptions*. If a system has been granted a variance or an exemption, the report must contain:

(1) An explanation of the reasons for the variance or exemption;

(2) The date on which the variance or exemption was issued;

(3) 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; and

(4) A notice of any opportunity for public input in the review of the variance or exemption.

(g) *Additional information*. (1) The reports must contain a brief explanation regarding contaminants which may reasonably be expected to be found in drinking water including bottled water. This explanation may include the language of paragraphs (g)(1)(i) through (iii) of this section. Paragraph (g)(1)(iv) of this section is provided as a minimal alternative to paragraphs (g)(1)(i) through (iii) of this section. Systems may also develop their own comparable language. The report also must include the language of paragraph (g)(1)(v) of this section.

(i) The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

(ii) Contaminants that may be present in source water include:

(A) *Biological contaminants*, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

(B) *Inorganic contaminants*, such as salts and metals, which can be naturally-occurring or result from urban storm run-off, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

(C) *Pesticides and herbicides*, which may come from a variety of sources such as agriculture, storm water runoff, and residential uses.

(D) *Organic chemicals*, including synthetic and volatile organics, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water run-off and septic systems.

(E) *Radioactive materials*, which can be naturally-occurring or be the result of oil and gas production and mining activities. (iii) In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water.

(iv) All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants.

(v) The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

(2) The report must include the telephone number of the owner, operator, or designee of the public water system as a source of additional information concerning the report.

(3) In communities with a large proportion of non-English speaking residents, the report must contain information in the appropriate language regarding the importance of the report or contain a telephone number or address where such residents may contact the system to obtain a translated copy of the report or assistance in the appropriate language.

(4) The systems must include in the report information (e.g., time and place of regularly scheduled board meetings) about opportunities for public participation in decisions that may affect the quality of the water.

(5) The systems may include such additional information as they deem necessary for public education consistent with, and not detracting from, the purpose of the report.

#### § 141.154 Required health information.

(a) All reports must prominently display the following language: Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some

elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* are available from the Safe Drinking Water Hotline (800-426-4791).

(b) Reports which identify a violation of a treatment technique must include the relevant language listed in paragraph (c) of this section:

(1) *Surface Water Treatment Rule:* (i) For unfiltered systems required to filter: Unfiltered water may contain organisms such as viruses, bacteria, and *Giardia*. When they are present in sufficient number, these organisms can cause symptoms such as diarrhea, cramps, headaches, and fatigue. EPA has determined that these organisms can be controlled more effectively by requiring water systems to filter that water rather than by setting an MCL.

(ii) For filtered systems in violation of the SWTR: Inadequately treated water may contain organisms such as viruses, bacteria, *Giardia*, and *Legionella*. When they are present in sufficient number, these organisms can cause symptoms such as diarrhea, cramps, headaches and fatigue. EPA has determined that these organisms can be controlled more effectively by requiring water systems to filter and disinfect that water than by setting an MCL.

(2) *Acrylamide:* Acrylamide is an impurity found in some chemicals used in drinking water treatment. EPA has determined that requiring proper use of water treatment chemicals is more effective than setting an MCL for their impurities. People who drink water containing high levels of acrylamide over a long period of time could have problems with their nervous system including paralysis and may have an increased risk of getting cancer.

(3) *Epichlorohydrin:* Epichlorohydrin is an impurity found in some chemicals used in drinking water treatment. EPA has determined that requiring proper use of water treatment chemicals is more effective than setting an MCL for their impurities. People who drink water containing high levels of epichlorohydrin over a long period of time could experience stomach, eye, or skin irritation, and may have an increased risk of getting cancer.

#### § 141.155 Report delivery.

(a) Except as provided in paragraph (e) of this section, each community

water system must mail one copy of the report to each customer. In addition, the system must make a good faith effort to reach consumers who do not get water bills, using means recommended by the State.

(b) Each community water system must mail a copy of the report to the State with a certification that the report has been distributed to customers, and that the information is correct and consistent with the compliance monitoring data previously submitted to the State.

(c) Each community water system must mail a copy of the report to:

(1) Any other Agency in the State with jurisdiction over community water systems, such as Public Utility Commissions;

(2) To State consumer advocate offices (if any); and

(3) To any other Agency or Clearinghouse identified by the Drinking Water Program Director.

(d) Each community water system must make its reports available to the public upon request.

(e) The Governor of a State, or the Tribal Leader where the Tribe has met the eligibility requirements contained in § 142.72 for the purposes of waiving the mailing requirement, can waive the mailing requirement of paragraph (a) of this section for community water systems serving fewer than 10,000 persons. In consultation with the tribal government, the regional Administrator may waive the mailing requirement of paragraph (a) of this section in areas in Indian country where no tribe has been deemed eligible.

(1) Such systems must:

(i) Publish the reports in one or more local newspapers serving the area in which the system is located;

(ii) Inform the customers that the reports will not be mailed, either in the newspapers in which the reports are published or by other means approved by the State; and

(iii) Make the reports available to the public upon request.

(2) Systems serving 500 or fewer persons may forego the requirements of paragraphs (e)(1) (i) and (ii) of this section if they provide notice at least once per year to their customers by mail, door-to-door delivery or by posting in an appropriate location that the report is available upon request.

## Appendix A to Subpart O to Part 141—Regulated Contaminants

Key

AL=Action Level  
 TT=Treatment Technique  
 MCL=Maximum Contaminant Level  
 MCLG=Maximum Contaminant Level Goal  
 mg/l=milligrams per liter, or parts  
 per million  
 µg/l=micrograms per liter, or parts  
 per billion  
 nanograms/liter, or parts per  
 trillion

picograms/liter, or parts per  
 quadrillion  
 mrem/year=millirems per year (a  
 measure of radiation absorbed by the  
 body)  
 pCi/l=picocuries per liter (a  
 measure of radioactivity)  
 MFL=million fibers per liter

Contaminant (units)	MCLG	MCL	Major Sources
Total Coliform Bacteria (including fecal coliform and E. coli)	0	presence of coliform bacteria in ≤5% of monthly samples, or if a routine sample and a follow up repeat sample are total coliform positive and one is also fecal coliform or E. coli positive	Human and animal fecal waste
Viruses, <i>Giardia</i>	0	TT	Human and animal fecal waste
<i>Legionella</i>	0	TT	Found naturally in water, multiplies in heating systems
Beta/photon emitters (mrem/yr)	0	4	Decay of natural and man-made deposits
Alpha emitters (pCi/l)	0	15	Erosion of natural deposits
Combined radium (pCi/l)	0	5	Erosion of natural deposits
Antimony (µg/l)	6	6	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Arsenic (µg/l)	50	50	Runoff from orchards; natural deposits; Runoff from glass and electronics production wastes
Asbestos (MFL)	7	7	Decay of asbestos cement water mains; Erosion of natural deposits

Barium (mg/l)	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Beryllium ( $\mu\text{g/l}$ )	4	4	Discharge from metal refineries and coal-burning factories; Discharge from electrical, aerospace, and defense industries
Cadmium ( $\mu\text{g/l}$ )	5	5	Corrosion of galvanized pipes; Erosion of natural deposits; Discharge from metal refineries; runoff from waste batteries and paints
Chromium ( $\mu\text{g/l}$ )	100	100	Discharge from steel and pulp mills; Erosion of natural deposits
Copper (mg/l)	1.3	AL=1.3	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Cyanide ( $\mu\text{g/l}$ )	200	200	Discharge from steel/metal factories; Discharge from plastic and fertilizer factories
Fluoride (mg/l)	4	4	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Lead ( $\mu\text{g/l}$ )	0	AL=15	Corrosion of household plumbing systems; Erosion of natural deposits
Mercury ( $\mu\text{g/l}$ )	2	2	Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills; Runoff from cropland
Nitrate (mg/l)	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Nitrite (mg/l)	1	1	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Selenium ( $\mu\text{g/l}$ )	50	50	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
Thallium ( $\mu\text{g/l}$ )	0.5	2	Leaching from ore-processing sites; Discharge from electronics, glass, and drug factories
Turbidity	n/a	TT	Soil runoff

2,4-D ( $\mu\text{g}/\text{l}$ )	70	70	Runoff from herbicide used on row crops
2,4,5-TP (Silvex) ( $\mu\text{g}/\text{l}$ )	50	50	Residue of banned herbicide
Acrylamide	0	TT	Added to water during sewage/wastewater treatment
Alachlor ( $\mu\text{g}/\text{l}$ )	0	2	Runoff from herbicide used on row crops
Atrazine ( $\mu\text{g}/\text{l}$ )	3	3	Runoff from herbicide used on row crops
Benzo(a)pyrene [PAHs] (nanograms/l)	0	200	Leaching from linings of water storage tanks and distribution lines
Carbofuran ( $\mu\text{g}/\text{l}$ )	40	40	Leaching of soil fumigant used on rice and alfalfa
Chlordane ( $\mu\text{g}/\text{l}$ )	0	2	Residue of banned termiticide
Dalapon ( $\mu\text{g}/\text{l}$ )	200	200	Runoff from herbicide used on rights of way
Di (2-ethylhexyl) adipate ( $\mu\text{g}/\text{l}$ )	400	400	Leaching from PVC plumbing systems; Discharge from chemical factories
Di (2-ethylhexyl) phthalates ( $\mu\text{g}/\text{l}$ )	0	6	Discharge from rubber and chemical factories
Dinoseb ( $\mu\text{g}/\text{l}$ )	7	7	Runoff from herbicide used on soybeans and vegetables
Diquat ( $\mu\text{g}/\text{l}$ )	20	20	Runoff from herbicide use
Dioxin [2,3,7,8-TCDD] (picograms/l)	0	30	Emissions from waste incineration and other combustion; Discharge from chemical factories
Endothall ( $\mu\text{g}/\text{l}$ )	100	100	Runoff from herbicide use
Endrin ( $\mu\text{g}/\text{l}$ )	2	2	Residue of banned insecticide
Epichlorohydrin	0	TT	Discharge from industrial chemical factories; Added to water during treatment process
Glyphosate ( $\mu\text{g}/\text{l}$ )	700	700	Runoff from herbicide use
Heptachlor (nanograms/l)	0	400	Residue of banned termiticide
Heptachlor epoxide (nanograms/l)	0	200	Breakdown of heptachlor
Hexachlorobenzene ( $\mu\text{g}/\text{l}$ )	0	1	Discharge from metal refineries and agricultural chemical factories

Hexachlorocyclopentadiene ( $\mu\text{g}/\text{l}$ )	50	50	Discharge from chemical factories
Lindane (nanograms/l)	200	200	Runoff/leaching from insecticide used on cattle, lumber, gardens
Methoxychlor ( $\mu\text{g}/\text{l}$ )	40	40	Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, livestock
Oxamyl [Vydate] ( $\mu\text{g}/\text{l}$ )	200	200	Runoff/leaching from insecticide used on apples, potatoes and tomatoes
PCBs [Polychlorinated biphenyls] (nanograms/l)	0	500	Runoff from landfills; Discharge of waste chemicals
Pentachlorophenol ( $\mu\text{g}/\text{l}$ )	0	1	Discharge from wood preserving factories
Picloram ( $\mu\text{g}/\text{l}$ )	500	500	Herbicide runoff
Simazine ( $\mu\text{g}/\text{l}$ )	4	4	Herbicide runoff
Toxaphene ( $\mu\text{g}/\text{l}$ )	0	3	Runoff/leaching from insecticide used on cotton and cattle
Benzene ( $\mu\text{g}/\text{l}$ )	0	5	Discharge from factories; Leaching from gas storage tanks and landfills
Carbon tetrachloride ( $\mu\text{g}/\text{l}$ )	0	5	Discharge from chemical plants and other industrial activities
Chlorobenzene ( $\mu\text{g}/\text{l}$ )	100	100	Discharge from chemical and agricultural chemical factories
Dibromochloropropane (nanograms/l)	0	200	Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards
o-Dichlorobenzene ( $\mu\text{g}/\text{l}$ )	600	600	Discharge from industrial chemical factories
p-Dichlorobenzene ( $\mu\text{g}/\text{l}$ )	75	75	Discharge from industrial chemical factories
1,2-Dichloroethane ( $\mu\text{g}/\text{l}$ )	0	5	Discharge from industrial chemical factories
1,1-Dichloroethylene ( $\mu\text{g}/\text{l}$ )	7	7	Discharge from industrial chemical factories
cis-1,2-Dichloroethylene ( $\mu\text{g}/\text{l}$ )	70	70	Discharge from industrial chemical factories
trans-1,2-Dichloroethylene ( $\mu\text{g}/\text{l}$ )	100	100	Discharge from industrial chemical factories
Dichloromethane ( $\mu\text{g}/\text{l}$ )	0	5	Discharge from pharmaceutical and chemical factories

1,2-Dichloropropane ( $\mu\text{g}/\text{l}$ )	0	5	Discharge from industrial chemical factories
Ethylbenzene ( $\mu\text{g}/\text{l}$ )	700	700	Discharge from petroleum refineries
Ethylene dibromide (nanograms/l)	0	50	Discharge from petroleum refineries
Styrene ( $\mu\text{g}/\text{l}$ )	100	100	Discharge from rubber and plastic factories; Leaching from landfills
Tetrachloroethylene ( $\mu\text{g}/\text{l}$ )	0	5	Leaching from PVC pipes; Discharge from factories and dry cleaners
1,2,4-Trichlorobenzene ( $\mu\text{g}/\text{l}$ )	70	70	Discharge from textile-finishing factories
1,1,1-Trichloroethane ( $\mu\text{g}/\text{l}$ )	200	200	Discharge from metal degreasing sites and other factories
1,1,2-Trichloroethane ( $\mu\text{g}/\text{l}$ )	3	5	Discharge from industrial chemical factories
Trichloroethylene ( $\mu\text{g}/\text{l}$ )	0	5	Discharge from petroleum refineries
TTHM [Total trihalomethanes] ( $\mu\text{g}/\text{l}$ )	0	100	By-product of drinking water chlorination
Toluene (mg/l)	1	1	Discharge from petroleum factories
Vinyl Chloride ( $\mu\text{g}/\text{l}$ )	0	2	Leaching from PVC piping; Discharge from plastics factories
Xylenes (mg/l)	10	10	Discharge from petroleum factories; Discharge from chemical factories

## Appendix B to Subpart O of Part 141— Health Effect Language

### Biological Contaminants

(1) *Total Coliform*. Coliforms are bacteria which 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.

(2) *Fecal coliform/E.Coli*. Fecal coliform and E. Coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Germs in these wastes can cause diarrhea, cramps, nausea, headaches, or fatigue.

### Radioactive Contaminants

(3) *Beta/Photon emitters*. Certain minerals are radioactive; photons and beta radiation are types of radioactivity. 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.

(4) *Alpha emitters*. Certain minerals are radioactive and emit a form of radiation known as alpha radiation. People who drink water containing these alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.

(5) *Combined Radium 226/228*. 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.

### Inorganic Contaminants

(6) *Antimony*. People who drink water containing antimony well in excess of the MCL over many years could experience changes in the cholesterol or glucose level in their blood.

(7) *Arsenic*. People who drink water containing arsenic well in excess of the MCL over many years could experience skin damage or problems with their nervous system.

(8) *Asbestos*. People who drink water containing asbestos in excess of the MCL over many years could get lung disease or may have an increased risk of getting cancer.

(9) *Barium*. People who drink water containing barium well in excess of the MCL over many years could experience high blood pressure.

(10) *Beryllium*. People who drink water containing beryllium in excess of the MCL over many years could experience bone or lung problems, or may have an increased risk of cancer.

(11) *Cadmium*. People who drink water containing cadmium well in excess of the MCL over many years could experience kidney problems.

(12) *Chromium*. People who drink water containing chromium well in excess of the MCL over many years could experience problems with their kidneys or circulation.

(13) *Copper*. Copper is an essential nutrient but people who drink water containing copper in excess of the action level over a relatively short amount of time could experience problems with their stomach or intestines. People who drink water containing copper well 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.

(14) *Cyanide*. People who drink water containing cyanide well in excess of the MCL over many years could experience weight loss, nerve damage, or problems with their thyroid.

(15) *Fluoride*. People who drink water containing fluoride well in excess of the MCL over many years could get bone disease.

(16) *Lead*. 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, high blood pressure, or may be at an increased risk of getting cancer.

(17) *Mercury*. People who drink water containing mercury well in excess of the MCL over many years could experience kidney damage.

(18) *Nitrate*. Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and die. Adults who drink water containing nitrates well in excess of the MCL over many years could experience kidney or spleen problems.

(19) *Nitrite*. Infants below the age of six months who drink water containing nitrite in excess of the MCL could become seriously ill and die. Adults who drink water containing nitrite well in excess of the MCL over many years could experience kidney or spleen problems.

(20) *Selenium*. Selenium is an essential nutrient. However, people who drink water containing selenium well in excess of the MCL over many years could experience hair or fingernail losses, or problems with their kidneys, liver, nervous system, or circulation.

(21) *Thallium*. People who drink water containing thallium well in excess of the MCL over many years could experience changes in their blood, problems with their kidney, intestine, or liver, or hair loss.

(22) *Turbidity*. There is no MCL for turbidity, and turbidity has no health effects. However, turbidity can provide a medium for bacterial growth.

### Synthetic Organic Chemicals Including Pesticides and Herbicides

(23) *2,4-D*. 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 nervous system, kidneys, or liver.

(24) *2,4,5-TP (Silvex)*. People who drink water containing silvex well in excess of the MCL over many years could experience minor liver or kidney problems.

(25) *Alachlor*. People who drink water containing alachlor in excess of the MCL over many years could have problems with their liver, kidneys, or spleen, or may have an increased risk of getting cancer.

(26) *Atrazine*. People who drink water containing atrazine in excess of the MCL over many years could experience weight loss, problems with their heart or retinas, some muscle deterioration, or may have an increased risk of getting cancer.

(27) *Benzo(a)pyrene [PAHs]*. People who drink water containing benzo(a)pyrene in

excess of the MCL over many years may have an increased risk of getting cancer.

(28) *Carbofuran*. People who drink water containing carbofuran well in excess of the MCL over many years could experience problems with their nervous or reproductive systems.

(29) *Chlordane*. People who drink water containing chlordane in excess of the MCL over many years could experience problems with their liver, kidneys, heart, lungs, spleen or adrenal glands, or may have an increased risk of getting cancer.

(30) *Dalapon*. People who drink water containing dalapon well in excess of the MCL over many years could experience minor kidney changes.

(31) *Di (2-ethylhexyl) adipate*. People who drink water containing di (2-ethylhexyl) adipate well in excess of the MCL over many years could experience reduced body weight or bone mass, problems with their liver or testicles, or may have an increased risk of getting cancer.

(32) *Di (2-ethylhexyl) phthalate*. People who drink water containing di (2-ethylhexyl) phthalate in excess of the MCL over many years may have problems with their liver, testicles, or experience adverse reproductive effects, and may have an increased risk of getting cancer.

(33) *Dinoseb*. People who drink water containing dinoseb well in excess of the MCL over many years could experience changes in their thyroid or testicles.

(34) *Dioxin (2,3,7,8-TCDD)*. People who drink water containing dioxin in excess of the MCL over many years could experience problems with their reproductive system and may have an increased risk of getting cancer.

(35) *Diquat*. People who drink water containing diquat well in excess of the MCL over many years could get cataracts.

(36) *Endothall*. People who drink water containing endothall well in excess of the MCL over many years could experience an increase in the size of their stomach or intestines.

(37) *Endrin*. People who drink water containing endrin well in excess of the MCL over many years could experience convulsions or liver problems.

(38) *Glyphosate*. People who drink water containing glyphosate well in excess of the MCL over many years could experience problems with their kidneys or adverse reproductive effects.

(39) *Heptachlor*. People who drink water containing heptachlor in excess of the MCL over many years could experience extensive liver damage and may have an increased risk of getting cancer.

(40) *Heptachlor epoxide*. People who drink water containing heptachlor epoxide in excess of the MCL over many years could experience extensive liver damage, and may have an increased risk of getting cancer.

(41) *Hexachlorobenzene*. People who drink water containing hexachlorobenzene in excess of the MCL over many years could experience problems with their liver or kidneys, adverse reproductive effects, benign tumor of endocrine glands, and may have an increased risk of getting cancer.

(42) *Hexachlorocyclopentadiene*. People who drink water containing hexachloro-

cyclopentadiene well in excess of the MCL over many years could experience problems with their stomach or kidneys.

(43) *Lindane*. People who drink water containing lindane well in excess of the MCL over many years could experience problems with their kidneys or liver.

(44) *Methoxychlor*. People who drink water containing methoxychlor well in excess of the MCL over many years could experience problems with their liver, heart, or kidneys.

(45) *Oxamyl [Vydate]*. People who drink water containing oxamyl well in excess of the MCL over many years could experience weight loss.

(46) *PCBs [Polychlorinated biphenyls]*. People who drink water containing PCBs in excess of the MCL over many years could experience irritation of the nose, throat, or gastrointestinal tract, and may have an increased risk of getting cancer.

(47) *Pentachlorophenol*. 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.

(48) *Picloram*. People who drink water containing picloram well in excess of the MCL over many years could experience problems with their liver.

(49) *Simazine*. People who drink water containing simazine in excess of the MCL over many years could experience tremors, have problems with their kidneys, liver, or thyroid, and have an increased risk of getting cancer.

(50) *Toxaphene*. People who drink water containing toxaphene in excess of the MCL over many years could suffer from kidney or liver degeneration, have problems with their nervous system, and may have an increased risk of getting cancer.

#### **Volatile Organic Chemicals**

(51) *Benzene*. People who drink water containing benzene in excess of the MCL over many years may have an increased risk of getting cancer.

(52) *Carbon Tetrachloride*. 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.

(53) *Chlorobenzene*. People who drink water containing chlorobenzene well in excess of the MCL over many years could experience problems with their kidneys, liver, or nervous system.

(54) *Dibromochloropropane (DBCP)*. People who drink water containing DBCP in excess of the MCL over many years could experience some kidney damage and may have an increased risk of getting cancer.

(55) *o-Dichlorobenzene*. People who drink water containing o-dichlorobenzene well in excess of the MCL over many years could experience problems with their liver, kidneys, nervous systems, or damage to their blood cells.

(56) *para-Dichlorobenzene*. People who drink water containing p-dichlorobenzene well in excess of the MCL over many years could experience anemia, skin lesions, loss of appetite, damage to their liver, or changes in their blood.

(57) *1,2-Dichloroethane*. People who drink water containing 1,2-dichloroethane in excess of the MCL over many years may have an increased risk of getting cancer.

(58) *1,1-Dichloroethylene*. People who drink water containing 1,1-dichloroethylene in excess of the MCL over many years could experience problems with their liver and kidneys and may have an increased risk of getting cancer.

(59) *cis-1,2-Dichloroethylene*. People who drink water containing cis-1,2-dichloroethylene well in excess of the MCL over many years could experience problems with their liver, their circulation, or their nervous system.

(60) *trans-1,2-Dichloroethylene*. People who drink water containing trans-1,2-dichloroethylene well in excess of the MCL over many years could experience problems with their liver, their circulation, or their nervous system.

(61) *Dichloromethane*. People who drink water containing dichloromethane in excess of the MCL over many years could have liver problems and may have an increased risk of getting cancer.

(62) *1,2-Dichloropropane*. People who drink water containing 1,2-dichloropropane in excess of the MCL over many years could experience problems with their liver, kidneys, bladder, digestive or respiratory systems, and may have an increased risk of getting cancer.

(63) *Ethylbenzene*. People who drink water containing ethylbenzene well in excess of the MCL over many years could experience problems with their liver, kidneys, central nervous system, or eyes.

(64) *Ethylene dibromide*. People who drink water containing ethylene dibromide in excess of the MCL over many years could experience problems with their nervous system, liver, heart, or kidneys, and may have an increased risk of getting cancer.

(65) *Styrene*. People who drink water containing styrene in excess of the MCL over many years could have problems with their liver and may have an increased risk of getting cancer.

(66) *Tetrachloroethylene*. People who drink water containing tetrachloroethylene in excess of the MCL over many years could have problems with their liver, kidney or nervous system, and may have an increased risk of getting cancer.

(67) *1,2,4-Trichlorobenzene*. 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.

(68) *1,1,1-Trichloroethane*. People who drink water containing 1,1,1-trichloroethane well in excess of the MCL over many years could experience problems with their liver, nervous system or circulation.

(69) *1,1,2-Trichloroethane*. People who drink water containing 1,1,2-trichloroethane in excess of the MCL over many years could have problems with their liver or kidneys, and may have an increased risk of getting cancer.

(70) *Trichloroethylene*. 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.

(71) *THMs [Total Trihalomethanes]*. People who drink water containing trihalomethanes in excess of the MCL over many years may have an increased risk of getting cancer.

(72) *Toluene*. 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.

(73) *Vinyl Chloride*. People who drink water containing vinyl chloride in excess of the MCL over many years could have problems with their liver or nervous system, and may have an increased risk of getting cancer.

(74) *Xylenes*. People who drink water containing xylenes well in excess of the MCL over many years could experience damage to their nervous system or problems with their liver or kidneys.

#### **PART 142—NATIONAL PRIMARY DRINKING WATER REGULATIONS IMPLEMENTATION**

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

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

2. Section 142.10 would be amended by adding a new paragraph (b)(6)(vii) to read as follows:

#### **§ 142.10 Requirements for a determination of primary enforcement responsibility.**

\* \* \* \* \*

(b) \* \* \*

(6) \* \* \*

(vii) Authority to require community water systems to provide consumer confidence reports as required under 40 CFR part 141, subpart O.

\* \* \* \* \*

3. Section 142.16 would be amended by adding paragraph (f) to read as follows:

#### **§ 142.16 Special primacy requirements.**

\* \* \* \* \*

(f) Consumer confidence report requirements. (1) Each State that has primary enforcement responsibility must adopt the requirements of 40 CFR part 141, subpart O, no later than [date 2 years after date of publication of final rule in the **Federal Register**]. States must submit revised programs to EPA for approval using the procedures in § 142.12(b) through (d).

(2) Each State that has primary enforcement responsibility must make reports submitted to the States in compliance with 40 CFR 141.155(b) available to the public upon request or maintain a list of telephone numbers for operators of community water systems.

(3) Each State that has primary enforcement responsibility must maintain the certifications obtained pursuant to 40 CFR 141.155(b) for a period of 5 years.

4. Section 142.72 would be amended by revising the introductory text to read as follows:

**§ 142.72 Requirements for tribal eligibility.**

The Administrator is authorized to treat an Indian tribe as eligible to apply for primary enforcement for the Public Water System Program and the authority to waive the mailing requirements of 40 CFR 141.155(a) if it meets the following criteria:

\* \* \* \* \*

5. Section 142.78 would be amended by revising paragraph (b) to read as follows:

**§ 142.78 Procedure for processing an Indian tribe's application.**

\* \* \* \* \*

(b) A tribe that meets the requirements of 40 CFR 141.72 is eligible to apply for development grants and primacy enforcement responsibility for a Public Water System Program and associated funding under section 1443(a) of the Act and for primary enforcement responsibility for public water systems under section 1413 of the Act and for the authority to waive the mailing requirement of 40 CFR 141.155(a).

[FR Doc. 98-3752 Filed 2-12-98; 8:45 am]

BILLING CODE 6560-50-P