# ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 141 and 142

[FRL-6145-3]

RIN 2040-AC 99

National Primary Drinking Water Regulations: Consumer Confidence Reports

**AGENCY:** Environmental Protection

Agency (EPA).

ACTION: Final rule.

SUMMARY: Today, EPA is promulgating a final rule that requires community water systems to prepare and provide to their customers annual consumer confidence 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 will provide valuable information to customers of community water systems and allow them to make personal health-based decisions regarding their drinking water consumption.

These reports are the centerpiece of public right-to-know in SDWA. The information contained in consumer confidence reports can raise consumers' awareness of where their water comes from, help them understand the process by which safe drinking water is delivered to their homes, and educate

them about the importance of preventative measures, such as source water protection, that ensure a safe drinking water supply. Consumer confidence reports can promote dialogue between consumers and their drinking water utilities, and can encourage consumers to become more involved in decisions which may affect their health. The information in the reports can be used by consumers, especially those with special health needs, to make informed decisions regarding their drinking water. Finally, consumer confidence reports are a key that can unlock more drinking water information. They will provide access through references and telephone numbers to source water assessments, health effects data, and additional information about the water system.

**DATES:** The effective date for this final rule is September 18, 1998.

The information collection requirements contained in subpart O of part 141 have not been approved by the Office of Management and Budget (OMB) and are not effective until OMB has approved them. EPA will publish a final rule announcing the effective date when OMB approves the information collection requirements.

ADDRESSES: Copies of the public comments received, EPA responses, and all other supporting documents are available for review at the U.S. EPA Water Docket (4101), Docket W-97-18,

401 M Street, SW, Washington DC 20460. For an appointment to review the docket, call 202–260–3027 between 9 a.m. and 3:30 p.m. and refer to Docket W–97–18.

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.

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Regulated persons. Potentially regulated persons are community water systems (CWSs).

| Category             | Example of regulated entities   |  |  |
|----------------------|---|--|--|
| Privately-owned CWSs | Municipalities; County Governments; Water districts; Water and Sewer Authorities.  Private water utilities; homeowners associations.  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, but rather provides a guide for readers regarding entities likely to be regulated by this action. This table lists the types of entities that EPA is now aware could potentially be regulated by this action. Other types of entities not listed in this table could also be regulated. To determine whether your facility is regulated by this action, you should carefully examine the applicability criteria in § 141.151 of the rule. If you have questions regarding the applicability of this action to a particular entity, consult one of the people listed in the FOR FURTHER **INFORMATION CONTACT** section.

### I. Statutory Authority

Section 114 of the Safe Drinking Water Act Amendments of 1996 (Pub. L. 104–182), enacted August 6, 1996, amends section 1414(c) of the SDWA

(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., by 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 plainlyworded 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 tollfree hotline that consumers can call for more information and further explanation.

Section 1414 of SDWA, as amended, also provides, in a new section 1414(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:

- 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, a 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 (NPDWR), as required by the Administrator, and a 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 system's 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, making it available upon request, and providing notice of its availability 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.

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 is intended to fulfill the rulemaking requirements outlined in section 1414(c)(4).

#### II. Regulatory Background

The rule promulgated today was proposed on February 13, 1998. As required by SDWA, the Agency met extensively with a broad range of groups in the development of the proposal. In particular, EPA formed a working group under the aegis of the National Drinking Water Advisory Council (NDWAC) to analyze and debate issues related to the proposal. In addition, EPA convened a one-day meeting of a panel of experts in public health and communication of risk-related information. These consultations are described in detail in the preamble to the proposed rule (63 FR 7606, February 13, 1998). These consultations helped EPA draft proposed rule language which was then reviewed by NDWAC. The provisions contained in the proposal included all the provisions for which NDWAC reached consensus.

After it proposed the rule, EPA had a series of four focus groups conducted by a contractor. The purpose of the focus groups was to test various alternatives for the definitions of MCL and MCLG and to gauge the public's reactions to health effects statements. In addition, focus group participants were asked to give their reaction to two consumer

confidence reports that had actually been issued by community water systems. The availability of a report on the results of these focus groups was announced in the **Federal Register** on May 15,1998 with a request for comments to be submitted to EPA no later than June 15,1998. The Agency received a few comments and considered them, along with all other comments received on the proposal, in developing this final rule.

# III. Significant Decisions Affecting the Final Rule

The proposed rule discussed, but did not include, regulatory language addressing two issues which were discussed during the consultation process. EPA believed additional input through the comment process was necessary in order to make informed decisions.

The first issue was the request by some stakeholders that reports include a general warning that drinking water may pose a special health risk for pregnant women and children. The second issue concerned the Administrator's statutory authority to require in the reports health effects language for not more than three regulated contaminants detected at levels below the MCL. Both of these issues relate to providing additional health information and commenters were asked to consider the link between these issues. The Agency has also considered this link when making decisions in today's rulemaking.

# A. Health Warning for Pregnant Women and Children

During the development of the proposal, some stakeholders advocated requiring all consumer confidence reports to include language alerting consumers to the dangers posed to pregnant women and children by certain contaminants in drinking water. such as nitrate, lead, and certain unspecified pesticides. The Agency stated in the proposal that inclusion of such a warning in all reports did not seem warranted but requested comments in order to reconsider this issue for the final rule. The Agency also requested data on pesticides and other contaminants which would support the need for a special warning for pregnant women and children.

Most commenters argued that a general health warning for pregnant women and children was unnecessary, and would confuse and needlessly scare consumers. These commenters agreed with the Agency that the MCL for nitrate and the action level for lead protect atrisk populations. Other commenters

argued that some form of warning was necessary, particularly to address lead and nitrate, but they agreed that such a warning should only be included in reports of systems which detected these contaminants.

No data were submitted on special risks presented by pesticides. The only data that commenters submitted were studies on the impact of lead on children and of trihalomethanes on pregnant women and fetuses. In addition, some commenters requested changes to the health effects language proposed in appendix B regarding the potential impacts of some contaminants on pregnant women, children, and atrisk populations. These comments are addressed in section G of this preamble.

Some commenters suggested lead and nitrate as two of the contaminants for which the Administrator should use her authority to require health effects language even when systems are in compliance with the regulations. As explained below, the Agency believes that it can better use this authority for other contaminants.

#### B. Educational Information for Lead, Nitrate, and Arsenic

The Agency sees merit in providing additional information on lead and nitrate under certain circumstances since these are contaminants for which a special risk for children has been clearly established. EPA also believes that consumers may require additional information about arsenic.

In the case of nitrate, there is only a small margin of safety provided by the MCL, and the amount of nitrate in drinking water is subject to seasonal fluctuations beyond water systems' control. Although any recorded violations of the MCL would require public notification, it is possible due to monitoring frequency that in areas where nitrate levels are generally high, short-term spikes above the MCL could occur and not be detected. Therefore, EPA believes that it is prudent to require systems which detect nitrate above 5 mg/l (50% of the MCL) to include some educational information in their reports regarding the risk posed by nitrates for infants. This information will help parents to understand fully the potential effects of nitrate exposure above the MCL.

For lead, the Agency's concern is that while the sampling is designed to look for the worst conditions, it is possible that a significant number of households could have high lead levels even though a system is technically in compliance with the lead rule. The closer a system is to exceeding the action level in more than 10% of the sampling sites, the

higher that likelihood. Lead poses a substantial risk to infants and children, but it is easy for parents to take the small precautions necessary to reduce this risk. The Agency believes that incorporating educational information about lead in the reports of systems which detect lead above the action level in more than 5% of homes sampled (50% of the action level) is warranted.

Other commenters expressed concerns about the adequacy of the MCL for arsenic because it does not take into account the contaminant's carcinogenicity. EPA is required to promulgate a revised arsenic standard by January 2001. In the meantime, EPA has decided that it is appropriate for systems that detect arsenic above 25  $\mu$ g/l (50% of the existing MCL) to include additional information about arsenic in their reports. As with nitrate, EPA is using a threshold of 50% of the MCL to trigger this requirement based on comments received regarding the appropriate threshold for risk-related information. This requirement will be deleted from this rule when a revised arsenic MCL is promulgated. EPA is including an example of acceptable language in the regulation to help systems provide accurate information to customers. The regulations also provide that systems can use this language or develop their own in consultation with the primacy agency.

Inclusion of this information on arsenic, lead, and nitrate is mandatory, and EPA is including an example of acceptable language in the regulation to help systems provide accurate information to customers. However, EPA believes that water systems should have the flexibility to tailor their information to specific local circumstances. Therefore, the regulations provide that systems can use the language provided by EPA or develop their own in consultation with the primacy agency. The Agency is using 50% of the MCL or action level as the threshold for this requirement because commenters generally agreed that additional warnings should only be required where systems actually detect the contaminants. Many commenters agreed that half the MCL would be an appropriate threshold for requiring additional risk-related information (even if they expressed strong reservations about the need to do so).

The requirement for these informational statements is based on EPA's authority to require information in the reports other than that detailed in SDWA section 1414(c). See section 1414(c)(4)(B).

# C. Health Information for Additional Contaminants

The 1996 SDWA Amendments authorize the Administrator to require inclusion of language describing health concerns in reports for "not more than three regulated contaminants" other than those detected at levels above the MCL. In the preamble to the proposal, the Agency stated its intent to use the authority provided by the statute in a judicious manner and requested comments on two options.

Option I was to require health effects language whenever a regulated contaminant, for which EPA has proposed to lower the MCL or has promulgated a revised MCL for which the effective date has not yet occurred, is detected at a level above the revised level. The Agency noted that the immediate impact of this option would be that water systems that detect Total Trihalomethanes (TTHMs) above the proposed revised MCL of 80 µg/l would have to include in their reports the language of the proposed rule's appendix B describing the health effects of TTHMs. Further, the preamble explained that the Agency would make decisions on additional revised MCLs on a case-by-case basis and that a likely candidate for future requirements under this scheme would be arsenic.

Option II was to select three carcinogens for which the MCL allows a risk level in the range of  $10^{-4}$  to  $10^{-5}$ . The Agency requested comments on which of these contaminants would be the most significant from a health standpoint if detected in the finished water. The Agency also requested comments on whether it should select a threshold for reporting on these contaminants, such as detection  $\geq 50\%$  of the MCL.

Most commenters believed that providing health effects language for any contaminant detected below its MCL would be confusing and urged EPA to not do so. Stakeholders that commented on the proposed options generally preferred Option I but only for newly promulgated MCLs, not for proposed MCLs. They expressed the belief that a promulgated MCL establishes a clear threshold for triggering the requirement. Also, by the time EPA promulgates an MCL, it has carefully documented the health effects which are the basis for the regulation and from which it can craft a short health effects statement.

The Agency finds these arguments persuasive and will use this authority in future rulemaking to require health effects language for contaminants when MCLs are promulgated or revised. This

health effects language will be included in the reports of systems which are not technically in violation of the regulations because the MCL is not yet effective, but which detect the contaminant above the new or revised MCL.

As noted in the proposal, the first rulemaking in which EPA will implement this authority will be the revision of the MCL for TTHMs (currently scheduled for promulgation later this year). In that rulemaking, EPA will amend 40 CFR part 141, subpart O (today's rule) to add a new paragraph (e) to § 141.154 that will require systems detecting TTHMs at levels above the revised MCL to include in their reports the health effects information for TTHMs in appendix C prior to the effective date of the new MCL. EPA will make decisions about additional uses of this authority (for two additional contaminants) in later MCL rulemakings.

#### IV. Description of Today's Action

This section explains the elements of the regulation and the changes from the proposal. In response to comments received, EPA has made several significant changes to the proposal, clarified some requirements, and slightly reorganized the regulatory language. EPA evaluated all the comments it received, and has prepared a document explaining EPA's responses to those public comments. That document in available in the Water Docket. The Agency also considered the results of the focus group study as it shaped this final rule.

### A. Purpose and Applicability

Section 141.151 establishes the purpose and applicability of this rule. Today's rule establishes the minimum requirements for the content of consumer confidence reports. The rule applies to existing and new community water systems as defined in § 141.2.

In response to comments, EPA has made several changes to this section. First, some commenters expressed concerns that the language of § 141.151(a), which sets a performance standard for the reports, could be construed as requiring systems to include information on non-detected contaminants. EPA is clarifying that systems only need to address the risks (if any) from detected contaminants by adding the word "detected" to qualify the word "contaminants."

Second, commenters suggested that the term "hook-ups," used in the definition of customers, was not generally recognized by the industry and that "service connection" should be used instead. The Agency has made that change.

Third, many commenters believed that the word "detected" needed to be further defined by referring to detection limits specified elsewhere in the regulations. EPA agrees and has added § 141.151(d) to clarify the meaning of "detected" for this subpart.

Fourth, some commenters expressed concerns that States might exercise the flexibility to adopt alternative requirements for the form and content of the reports in ways that would undermine the intent of the Statute. EPA's intent in proposed § 141.151(d) was to clearly define this flexibility consistent with the statutory language and intent. EPA has expanded this section (now codified as § 141.151(e)) to clarify its meaning.

Finally, several commenters pointed out that the first reports would be due before States would have time to adopt their own regulations. These commenters stated their opinion that this meant these reports would have to be mailed to EPA even though the proposal stated that reports should be mailed to the States. EPA is clarifying its intent by using the term "primacy agency" in this final rule at § 141.151(f) and defining it as: the agency in the State or the tribal government which has jurisdiction over, and primary enforcement responsibility for, public water systems, even if that agency does not have interim or final primacy enforcement authority over this rule. Except in Wyoming, in the District of Columbia, and on tribal lands, the primacy agency is a state agency. EPA intends to enter into Memoranda of Understanding (MOU) with these state agencies to share information about water systems that fail to prepare and deliver reports. EPA will enforce the regulations until States get primacy for this regulation.

#### B. Effective Dates

Section 141.152 establishes the time line for implementation of this rule. Today's rule becomes effective 30 days after publication in the **Federal Register**. Community water systems must deliver the first report to their customers within 13 months of the regulation's effective date. This represents no change from the proposal, which was supported by most of the comments.

However, in response to comments, EPA is making two significant changes to this section. Many commenters believed that the timing of the reports should coincide with other reporting required by the statute, such as annual compliance reports, and that all reports

should be due on the same specific date. However, a significant number of commenters also believed that systems should be given flexibility to deliver reports as their billing cycle would allow, and that systems already delivering reports should be able to stay on their current schedule. Most commenters also believed that reports should contain calendar-year data. EPA's proposal would have allowed systems to choose any 12-month period for their reports as long as the period was consistent from report to report. Commenters argued that calendar-year data would allow States to assess report accuracy and evaluate compliance more easily.

EPA agrees with this second point and therefore is requiring in § 141.152(b) that the first report contain calendar year 1998 data, and that each report thereafter cover the succeeding calendar year. As far as the timing of delivery, EPA continues to believe that some flexibility is essential to avoid burdening systems with additional mailings, or severely disrupting the schedule of systems which already provide consumer confidence reports to their customers. However, since reports are now required for calendar-year data, it makes sense to require delivery of the report as close to the end of the calendar year as feasible, taking into account the fact that some data are second-hand (from wholesaler to retailer) and that each of these entities should be provided sufficient time. Therefore, while the first report continues to be due no later than 13 months after this regulation becomes effective, the regulations now provide in § 141.152(b) that the second report will be due by July 1, 2000 and subsequent reports by July 1 of each year thereafter. Systems may choose to deliver their reports earlier than these dates.

EPA also agrees with commenters that new systems should report data on a calendar-year basis and on the same schedule as existing systems. EPA has revised § 141.152(c) accordingly. It now requires new community water systems to deliver their first report by July 1 following their first full calendar year in operation.

Finally, as suggested by commenters, EPA is adding § 141.152(d) to require drinking water wholesalers to deliver data to the retailers by a date certain. The first set of data will have to be provided six months before retailers must deliver their first reports, to give retailers adequate time to prepare the reports. In following years, data will have to be delivered by April 1, unless the wholesaler and the retailer agree in a contract to a different date. EPA

believes that this flexibility is appropriate since the wholesalers might prepare the bulk of the CCRs for their customers, in which case the customers would not need the data so far in advance

#### C. Content of the Reports

In the proposal, the Agency generally limited the requirements for the content of reports, found in §§ 141.153 and 141.154, to a clarification and explanation of the requirements in section 114 of the 1996 SDWA Amendments. In addition to today's rule, EPA is preparing 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 is also developing a computerized fill-in-the-blank template 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 is aware of two organizations preparing similar templates, the American Water Works Association (AWWA) and the National Rural Water Association (NRWA).

# 1. Information on the Source of the Water Purveyed

In § 141.153(b), EPA proposed that reports 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.

One issue on which the Agency specifically requested comment was the extent to which reports should discuss sources of contamination that may have an impact on the quality of a system's drinking water sources. The Agency proposed that when a source water assessment has been completed for the water system, that system's consumer confidence report must notify customers of the availability of this information and the means to obtain it. Some commenters offered persuasive arguments for the need to take advantage of these reports to raise consumers' awareness of the importance of source water protection. They noted that in addition to source water assessments, information is available through sanitary surveys and reports prepared under section 305(b) of the Clean Water Act. Therefore, in the final rule, EPA is continuing to mandate in § 141.153(b) a notice of the availability

of source water assessments. In addition, EPA is encouraging systems that have information at hand regarding contamination sources, to include highlights of this information in their reports. EPA is also requiring systems, once the source water assessment is available, to include in the report a brief summary of the susceptibility of the drinking water source, using language provided by the primacy agency. EPA anticipates that States will prepare for the public brief summaries of source water assessments as part of the source water assessment process.

### 2. Definitions

The proposal included definitions in § 141.153(c) (1) and (2) of four terms: "Maximum Contaminant Level Goal or MCLG," "Maximum Contaminant Level or MCL," "Variances," and "Exemptions." These definitions differed from those found in 40 CFR 141.2 in order to explain these key regulatory terms in brief, plainlyworded sentences that consumers could easily understand.

Maximum Contaminant Level Goal (MCLG) and Maximum Contaminant Level (MCL). EPA specifically requested comments on its definitions for MCLG and MCL, and noted that the risk communication panel recommended that EPA test its definitions and, if necessary, revise them. The preamble included alternative definitions to the proposed language. EPA tested these alternatives on focus groups of consumers. The consumers reviewed the proposed definitions as well as definitions based on language suggested in the preamble.

For MCLG, EPA tested three definitions:

- 1. "The level of a contaminant in drinking water below which there is no known or expected risk to health."
- 2. "The maximum level of a contaminant in drinking water at which no known or anticipated adverse effects on the health of persons occur and which allows for an adequate margin of safety."
- 3. "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."

For MCL, EPA tested three definitions:

- 1. "The highest level of a contaminant that is allowed in drinking water."
- 2. "The maximum permissible level of a contaminant in drinking water which is delivered to any user of a public water system."
- 3. "The highest level of a contaminant that is allowed in drinking water, which

is set as close to the MCLG as feasible using the best available treatment."

Commenters were split on this issue, with a slight preference for EPA's proposed definitions (the first definitions above). However, many commenters believed that EPA's definitions were too short, that consumers need information about how MCLs and MCLGs are set, and that the difference between MCLs and MCLGs was lost. Members of the focus groups were comfortable with the third definitions above, which do provide some additional information and explain the difference between MCLGs and MCLs. Since the Agency's primary goal is to make these reports useful to the general public, EPA is basing the definitions in the final rule on this third set of definitions, with editorial modifications.

The Agency notes that it will continue to rely on the standard reporting to States and EPA of contaminant levels in determining whether a compliance or enforcement action is necessary. Neither the simpler definitions of regulatory terms nor the way in which data are presented in the consumer confidence reports will affect enforcement decisions on compliance with MCLs or action levels.

Variances and Exemptions. As recommended by the NDWAC Working Group, the proposal combined the definitions of variances and exemptions into a single definition, since the two terms describe a single concept. "Variances and exemptions" were defined in the proposal as "State permission not to meet an MCL or a treatment technique under certain conditions." EPA requested comment on whether to add 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. Most commenters agreed with including this sentence. Two commenters argued against it because they believe that it would cause confusion and undermine confidence in the MCLs. EPA agrees with these commenters. Further, the Statute provides for a different standard when issuing a variance ("adequate protection of human health") or an exemption ("no unreasonable risk to health"). For the sake of brevity and accuracy, EPA believes that it is appropriate to promulgate this definition as proposed, with the minor change that the definition applies to systems "operating under" a variance or exemption. One commenter pointed out that, as proposed, the provision could be construed to apply to a system which

had been granted a variance or exemption in the past even if this variance or exemption were no longer in effect.

EPA is also clarifying that the definitions apply only to variances and exemptions granted by the States or EPA pursuant to sections 1415 and 1416 of SDWA.

The definitions section of the proposed rule also included definitions for "treatment technique" and "action level" not mandated by SDWA but considered necessary by EPA to address situations likely to be encountered by many systems. The only significant comments on these definitions were from California utilities which pointed out that California has a different meaning for action level. This is a clear example of a requirement that a State may adjust in its own regulations. EPA is promulgating these definitions as proposed with a slight revision to the action level definition to render it more technically accurate.

As stated in the proposal, EPA notes that the use of these definitions in the consumer confidence reports does not alter the legal and enforceable definitions of these terms.

#### 3. Level of Detected Contaminants

Section 141.153(d) of the proposal generated the most comments and has been changed significantly in this final rule. In order to make the changes as understandable as possible, this section of the preamble first highlights the major comments received and EPA's revised approach in response to these comments. A section-by-section explanation of the changes follows this discussion.

Major Comments Regarding § 141.153(d). By far the greatest number of comments was submitted on the proposed requirement that reports include only one number per contaminant—the highest level used to determine compliance with an NPDWR. During the deliberations on the proposal, many stakeholders expressed concern that the compliance number, when based on an average of several samples, was not the best reflection of the quality of water delivered to homes and the possible variability in the quality of that water. Particularly, some stakeholders were concerned that some customers might, at times, get water containing certain contaminants exceeding the MCL and that reports would provide no indication of that possibility. To address this issue, EPA took NDWAC's recommendation and proposed that systems in which more than 10 percent of the customers are exposed to a level of contaminant which is consistently higher than the MCL would include in their report information regarding the magnitude of exposure and the location of the exposed population.

While some commenters agreed with the intent of this provision, all commenters, even some of its original proponents, deemed it unworkable. On the other hand, there was significant support among commenters for requiring inclusion of ranges of contaminant levels whenever compliance is based on an average. EPA believes that ranges will provide a more accurate picture of exposure to contaminants in a way which all systems can handle and which does not add any burden, since all measured contaminant levels are already in their files. California utilities pointed out that they provide ranges in their reports, and that this has proven to be neither a problem nor confusing to customers.

Some of the most voluminous comments were based on misunderstanding of what data EPA intended the reports to contain when systems provide water from various sources, and how systems should deal with the variability of the finished water on a temporal or spatial basis. One problem stemmed from EPA's inartful use of the word "blended" in the proposal's § 141.153(d)(3)(iii)(F). The other problem stemmed from the statement in proposed § 141.153(d)(1) that the report should provide an accurate picture of the level of contaminants to which consumers may have been exposed during the year. Some commenters misinterpreted these sections as requiring separate columns for each source, well, or point of entry, and lengthy explanations of the variability of the delivered water. This was not the Agency's intent.

With respect to systems with multiple sources, it is only when the water coming from each source remains completely hydraulically separated from water from other sources that EPA intended for reports to include separate columns of data. Most cases pointed out by commenters to show the infeasibility of the requirement—for example, "multiple sources of water serving an integrated distribution system," or "in the course of a given year an individual resident could receive water from up to three different surface water sources and up to 30 different wells whose supplies are co-mingled prior to receipt by the customer" were cases to which EPA had not intended the requirement apply. EPA has clarified this requirement in this final rule.

With respect to variability, in proposed § 141.153(d)(1), EPA

prescribed a performance standard similar to the one in § 141.151(a) but with the additional concept that operators needed to take into account seasonal variations which produce changes in water quality when selecting one number to put in the table. Since this final rule requires that the table include ranges, EPA believes that this reiteration of the performance standard in § 141.151(a) is no longer necessary and has deleted this section from the final rule.

Other significant comments concerned the organization of the information. While most commenters agreed that data on regulated contaminants should be highlighted as the focus of the report, many worried that the restriction of having to put all the mandated data in one table as required by proposed § 141.153(d)(3) could result in a report that was not consumer-friendly, and would limit water systems' ability to be innovative in presenting the information.

Commenters pointed out two further weaknesses of the one-table approach. First, for systems with many detected contaminants, one table may become overloaded with information. Commenters pointed out that contaminants could be split between several displays, e.g., organics and inorganics, or contaminants monitored at the treatment plant, in the distribution system, and at consumers' taps. Second, commenters pointed out that if a system wants to include additional data regarding these regulated contaminants, such as frequency of testing, or number of samples, it did not make sense to have to display this information separately. EPA agrees with the need to make presentation of the data as consumerfriendly as possible, and the need to provide sufficient flexibility so that reports can be improved based on feedback from customers. Therefore, EPA has modified this requirement to provide that information outlined in final § 141.153(d) needs to be displayed in one contiguous portion of the report, but not necessarily in a single table. Further changes to this section are discussed below.

Another major concern of commenters was the proposed requirement that reports use whole numbers to describe the MCL. Examples of such numbers were included in proposed Appendix A. Some commenters believed that EPA was asking that numbers be rounded up or that the detected level be expressed in whole numbers also. This was not the Agency's intent. As recommended by NDWAC, EPA proposed this requirement because it believes that

whole numbers make it easier for consumers to compare the level of a contaminant in the system's water with the MCL. Many consumers have trouble understanding decimal points. This was evident in the focus groups, in which people found reports containing mostly whole numbers much easier to read than reports where the significant digits came after multiple zeros. AWWA found similar results in its focus groups.

Some commenters expressed concerns that whole numbers would look like big numbers and would scare people. In response, EPA is making a minor change in the final rule to allow MCLs to be expressed as any number greater than 1.0. Detected levels will generally be much smaller—a fact that will be more obvious if a person has to distinguish the difference between, for example, 2 ppb and 0.002 ppb, rather than 0.002 ppm and 0.000002 ppm. In appendix A to this subpart, EPA has listed the MCL for each regulated contaminant in standard units and provided the multiplication factor (usually 1,000) and the MCL in the unit appropriate for use in the CCR. EPA notes that in appendix A, as well as appendices B and C of this final rule, the contaminants Ethylene dibromide (EDB) and 1,2-Dibromo-3chloropropane (DBCP) are grouped with the synthetic organic chemicals, as recommended by a commenter. EPA's electronic template will allow operators to enter the detected level of a contaminant in its usual unit. The software will do the conversion and automatically enter in the MCL and MCLG for that contaminant in appropriate units for these reports.

Detailed Analysis of Section 141.153(d). This section has been reorganized so that it now pertains only to contaminants for which monitoring is mandatory under the regulations (except Cryptosporidium). Requirements pertaining to reporting of Cryptosporidium, radon, and contaminants which a system detected through voluntary monitoring are now in § 141.153(e). The specific contaminants to which the requirements of § 141.153 apply are listed in § 141.153(d)(1).

In proposed § 141.153(d)(2), EPA would have required that systems identify the 12-month period during which the data used to prepare the report were collected. This final rule establishes mandatory calendar-year reporting requirements. Therefore, this section is no longer necessary and is deleted from this final rule.

In proposed § 141.153(d)(3), EPA proposed that all mandatory data related to regulated contaminants, and contaminants subject to mandatory

monitoring (with the exception of *Cryptosporidium*), be displayed in one discrete table. As explained above, EPA is changing this requirement. Section 141.153(d)(2) of this rule provides that all data relating to detected regulated contaminants, all data relating to unregulated contaminants for which monitoring is mandatory under § 141.40, and all data related to contaminants for which monitoring is required under §§ 141.142 and 141.143 (except Cryptosporidium) be displayed in one or several tables as long as these tables are adjacent to one another and the reader does not have to search for the information.

In response to comments that finished water should be the focus of the table(s), EPA is also clarifying in § 141.153(d)(1)(iii) that, for data collected under §§ 141.142 and 141.143 (the Information Collection Rule (ICR)), systems must report only finished water results.

When contaminants are monitored less than once a year, the proposal would have required that the report include the latest result and an explanation for why the sample was not taken during the reporting period. Commenters had concerns with the burden on operators of developing an explanation and with how far back in time a system should search for monitoring data. Commenters also requested clarification regarding how long ICR data should be reported. EPA has clarified these issues in § 141.153(d)(3). Reports containing data on contaminants detected in previous calendar years only need to include the date of the results and a statement indicating that the data are from the most recent testing done in accordance with the regulations. No data older than five years need be included in the first or subsequent reports (§ 141.153(d)(3)(i)). Results of ICR monitoring need only be included for five years or until the detected contaminant becomes regulated, whichever comes first (§ 141.153(d)(3)(ii)).

In response to comments, § 141.153(d)(4) of this final rule specifies more precisely the data which must be included in the table(s) for regulated contaminants. As explained above, EPA is making a minor change to the proposed requirement that the MCL must be expressed as a whole number. Instead, the final rule requires that the MCL must be expressed as a number equal to or greater than 1.0. The MCLG and detected contaminant level must be expressed in the same units as the MCL.

The proposed rule required that only the highest number reported to

demonstrate compliance with the MCL should be included in the table. However, in a major change from the proposal, the final regulation requires that, for contaminants for which compliance with the MCL is determined by calculating an average of several samples, the range of results must also be included. When compliance with the MCL is calculated at a number of sampling points by averaging quarterly samples, the report must include the highest average of any of the sampling points and the range of all samples  $(\S 141.153(d)(4)(iv)(B))$ . When compliance is based on a system-wide average, the reports must include that average and the range of all samples (§ 141.153(d)(4)(iv)(C)).

Some commenters pointed out that under certain conditions averages may be rounded to the same significant number of decimals as the MCL. For example, if the MCL for selenium is 0.05 mg/l and the average of 4 samples is 0.052 mg/l, the system is considered in compliance with the MCL because the average result can be rounded to 0.05 mg/l. These commenters expressed concerned that, in the CCR, when the MCL is expressed as 50 ppb, the results would have to be reported as 52 ppb leading customers to believe that the system was in non-compliance. This was not the Agency's intent. The Agency has clarified in a Note in § 141.153(d)(4)(iv)(C) that when rounding is allowed for compliance purposes, it should be done prior to multiplying the average number by the factor necessary to report the results in the same units as the MCL

For turbidity, as requested by commenters, the final regulations contain separate requirements for: (1) Systems which are required to install filtration but have not yet done so and for which turbidity has an MCL  $(\S 141.153(d)(4)(v)(A)), (2)$  systems which meet the filtration avoidance criteria (§ 141.153(d)(4)(v)(B)), and (3) systems which filter  $(\S 141.153(d)(4)(v)(C))$ . These requirements are designed to mirror the requirements for contaminants subject to an MCL by giving customers information about the range of conditions encountered by the system.

The final regulations also contain, in § 141.153(d)(4)(vi), specific requirements for reporting of lead and copper data. In addition to the 90th percentile value of the latest round of sampling, which customers can compare to the action level and which is equivalent to an "average" value for other contaminants, the regulations require reporting the number of sampling sites that exceeded the action

level. This will help customers understand that while a water system may be in compliance with the action level, people in certain homes may be exposed to lead or copper above that level.

Finally, for reporting of total coliforms, as suggested by some commenters, the regulations require that the highest monthly number of positive samples be reported for systems which collect fewer than 40 samples per month (§ 141.153(d)(4)(vii)). Systems which collect 40 samples or more per month must report the highest monthly percentage of positive samples (§ 141.153(d)(4)(vii)). For fecal coliforms, reports must include the total number of positive samples (§ 141.153(d)(4)(viii)).

The proposed rule required water systems to include in the table the likely source of any detected regulated contaminant. EPA noted that it expected systems to describe these sources in generic terms such as "agricultural runoff" or "petrochemical plants" unless the system had information obtained through source water assessments or other means that would allow the report to be more specific. EPA also provided a generic listing of potential sources in appendix A (now titled appendix B) to help systems who had no other available information. In general, commenters found proposed appendix A useful, but some expressed concern that the list of sources for each contaminant was mandatory and that a report would have to include all listed sources even if the operator knew that such contaminant sources could not exist in the system's location (e.g., cherry orchards in Alaska). EPA's intent is for this information to be as specific as possible. If a system has specific information through source water assessments or other means, that information should be included in the report. In the absence of specific information the system can choose from among the sources listed in appendix B those that best fit its situation. EPA has clarified the requirement in § 141.153(d)(4)(ix). If the system believes that none of the sources listed in appendix B clearly fit the system's situation, the report could include a footnote explaining that the typical sources of the contaminants are included in the table but do not exist in the source water areas to the best of the system's knowledge. EPA has also made some minor changes to the sources listed in the proposal, pursuant to comments received.

EPA has also revised the language of proposed § 141.153(d)(1) (iii)(F), now § 141.153(d)(5), to clarify that separate

data for multiple raw drinking water sources for one community water system are only necessary when the drinking water sources remain separate throughout the treatment plants and the distribution system, and to clearly include an option of doing several reports rather than one if the amount of data proved cumbersome.

In § 141.153(d)(3)(iv), EPA proposed to require that community water systems include specific information in their consumer confidence reports for every regulated contaminant detected in violation of an MCL or exceeding an action level. In general, commenters were supportive of the requirement as proposed and this section is promulgated as proposed with minor technical clarifications. Revised § 141.153(d)(6) requires that the table(s) identify violations of MCLs and treatment techniques. The report must include: (1) An explanation of the violation, including its length, which may be measured in consecutive days or weeks, or in repeated occurrences, (2) the potential health effects using the appropriate language of appendix C, and (3) the actions taken by the system to address the violation.

In proposed § 141.153(d)(3)(v), EPA included a requirement that systems report the highest detected level of unregulated contaminants. Several commenters pointed out that averages would be more representative of the quality of the water. EPA agrees, so, to conform with decisions regarding regulated contaminants, today's rule requires at § 141.153(d)(7) that reports include the average and range of detected unregulated contaminants.

### 4. Information on Other Contaminants

Section 141.153(e) of the final rule specifies the information to be included in the reports for *Cryptosporidium*, radon, and contaminants detected through voluntary monitoring. This information can be displayed anywhere in the report that the operator chooses.

In § 141.153(d)(4), the proposal required systems to include information on *Cryptosporidium* whether it is detected in compliance with the ICR regulations or through voluntary monitoring performed by a system. Many commenters believed that this section required detailed explanation regarding sampling and analysis protocols. This is not EPA's intent. The Agency believes that the information can be presented in a succinct statement that indicates whether Cryptosporidium has been found and whether it was found in the source water or finished water. The systems are free to provide their interpretation of the significance of these results. EPA has modified the language of this requirement, codified in § 141.153(e)(1), to make its intent clearer.

When a system detects radon, the Agency proposed that the reports include the results of the monitoring. information on how the monitoring was performed, and an explanation of the significance of the results. EPA stated that it would provide examples in guidance of what such an explanation might be. Some commenters objected to this requirement. Other commenters were concerned that the requirement would require detailed explanations of sampling and analysis techniques. As with Cryptosporidium, EPA's intent was to give as much flexibility as feasible to the systems and to use guidance to help systems which detect radon comply with the requirement. The final regulations continue to require reporting of radon detections but EPA has modified the language in § 141.153(e)(2) to clarify its intent.

When a system detects any other unregulated contaminant through voluntary monitoring, the proposed rule strongly encouraged systems to include the results of such monitoring if the presence of that contaminant was a reason for concern. EPA recommended that systems determine whether there was a health advisory or a proposed NPDWR for that contaminant in order to determine whether there may be a health concern.

Many commenters objected to this recommendation, while others asked that it be mandatory. EPA believes that, in order for the public to make wellinformed 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 that contaminant is currently required. The Agency believes that requiring 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)(1)(A) (which authorizes the Administrator to require water systems to report information to the public on unregulated contaminants). On the other hand, the Agency does not want to discourage systems from performing additional voluntary monitoring by requiring disclosure of information which they could not explain. Therefore, the Agency is including this provision in the final rule as proposed.

# 5. Compliance With National Primary Drinking Water Regulations

In the proposed rule, the Agency required that reports contain information on all NPDWR violations other than those discussed above. This information was to include a clear and readily understandable explanation of the violation and its health significance. EPA requested comments on the need to include all NPDWR violations as listed in proposed § 141.153(e), and on how detailed the explanation should be.

The majority of commenters agreed that all violations, not just those posing a health risk, should be reported in the CCR. Commenters stated that increased awareness of violations would lead to increased compliance with regulations. Some commenters, however, argued that this requirement would duplicate the public notification (PN) requirements, and that minor violations that do not have a direct impact on health should not be reported in the CCR.

The Statute clearly requires some duplication between CCR and PN requirements since both provisions mandate reporting of violations. Since neither the PN nor the CCR can assure complete notification of all consumers, in many instances the information will not be repetitive for the public. The Agency will explore in its revisions to the PN rule the feasibility of allowing the CCR to serve as PN for some violations, thereby eliminating some duplication. States can use their authority to promulgate alternative requirements in accordance with § 141.151(e) to modify this requirement for the purpose of their final regulation.

The Agency is retaining the requirement that CCRs report all NPDWR violations but is clarifying proposed § 141.153(e), now § 141.153(f).

To aid readers, the Agency is placing in the introductory paragraph the requirements which apply to all violations. The Agency is not prescribing any mandatory language to describe the health significance of monitoring and reporting violations, violations of recordkeeping or special monitoring requirements, or violations of the terms of a variance, an exemption, or an administrative or judicial order because the explanation has to be tailored to the circumstances of the violation. In some cases, there may be no health significance—for example, failure to send a report on time. In other cases, the system should use the health effect language of appendix C-for example, repeated failure to perform required monitoring for a contaminant with acute health effects.

The Agency also notes that the length of violation means the period of time during which a system does not have positive evidence that it has returned to compliance. If a system does not sample for an entire quarter, the report should state that the violation lasted for a quarter. It is also possible that a system would be in violation for the first and third quarters of a year. This should be explained in the report.

explained in the report.

Several commenters pointed out that the language contained in proposed § 141.154(b) for violations of the surface water treatment rule was cumbersome and difficult to understand. EPA agrees, so this language has been simplified and is now included in § 141.153(f)(2). The language is mandatory for systems which have failed to install adequate filtration or disinfection treatment, or have had failure of such equipment which constitutes a violation of the regulations, and for systems which fail to follow proper procedures to avoid filtration.

EPA also received comments indicating that the health effects language of proposed appendix B was not appropriate for all violations of the lead and copper rule. EPA agrees, and in keeping with decisions regarding monitoring, reporting, and recordkeeping violations explained above, EPA is not requiring the use of final appendix C language for these violations when they pertain to lead and copper. However, the Agency is requiring the use of appendix C language for failures to meet corrosion control requirements, the source water treatment requirements, and the lead service line replacement requirements (§ 141.153(f)(3)).

One commenter pointed out that discussions of violations of terms of variances, exemptions, or judicial orders should be limited to violations occurring during the 12-month period covered by the report. EPA agrees and has added this clarification for all violations.

Finally, commenters disagreed with the description of Acrylamide and Epichlorohydrin contained in proposed § 141.154(b)(2) and (3). EPA agrees that these descriptions may not be adequate. In any case, they are unnecessary. Appendix B includes language regarding the source of these contaminants which a system can use when it violates the treatment technique. The proposed health effects language has been moved to appendix C for the sake of consistency. Section 141.153(f)(4) prescribes the use of this language for violation of the treatment techniques for Acrylamide and Epichlorohydrin.

#### 6. Variances and Exemptions

The proposal included a requirement that reports must include information regarding variances or exemptions including: (1) An explanation of the reasons for the variance or exemption, (2) the dates when the variance or exemption was issued and is due for renewal, (3) 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, and (4) a notice of opportunities for public input into the process. Many people commented that EPA should only require a brief status report on compliance with the terms of the variance or exemption. This status report is embodied by the requirements of proposed § 141.153(f)(3), promulgated as § 141.153(g)(3). EPA does not believe, however, that this status report would make sense to consumers without the context that would be provided by final rule § 141.153(g)(1) of the final rule. The Agency also notes that section 1414(c)(4)(B)(iv) of the Statute requires reports to include the basis on which the variance or exemption was granted. The remaining information requires only one or two sentences and is not burdensome.

On the other hand, requiring a complete explanation of the terms and compliance schedule could be too long to fit in the short summary report envisioned by Congress. Therefore, the Agency is promulgating this requirement in the final rule as proposed with a minor clarification that the requirement applies to systems currently operating under a variance or an exemption.

### 7. Additional Information

The proposed rule included three paragraphs in response to the statutory requirements that the regulations include a "brief and plainly worded explanation regarding contaminants that may reasonably be expected to be present in drinking water, including bottled water." As explained in the proposal's preamble, EPA interpreted this section of the law as a mandate from Congress to include such an explanation in consumer confidence reports, because the people likely to read the regulations themselves already know why drinking water contains contaminants. It is reasonable to understand that Congress intended that this explanation be provided to customers.

In general, commenters did not have many issues with the language proposed at § 141.153(g)(1)(i) and (ii) which

fulfills the statutory requirement that an explanation be included in the regulation but provides systems the flexibility to adapt that explanation to their specific circumstances. There was some confusion, however, as to what EPA intended to require regarding bottled water. Some commenters believed that EPA meant for the reports to include results of bottled water analysis. This is not EPA's intent. The Agency does believe, however, that all customers have a right to know that bottled water may contain contaminants, just as tap water does, and that this was the Congressional concern behind the requirement that these regulations contain a statement about bottled water. Therefore, EPA has revised proposed § 141.153(g)(1) (now § 141.153(h)(1)) to combine the language of proposed paragraphs (iv) and (v) into one mandatory paragraph. It explains that drinking water, including bottled water, may contain contaminants, that the presence of contaminants does not necessarily indicate that the water poses a health risk, and that the EPA Safe Drinking Water Hotline can provide additional information about contaminants and health effects.

EPA has slightly modified this language to account for the point raised by a commenter that some bottled water, presumably distilled water, contains no detectable contaminants. The language of § 141.153(h)(1)(iii) is a slight modification of the proposed language, which clearly indicates that FDA's regulations must be equally protective of human health. This language is optional.

In § 141.153(g)(3), EPA proposed that, in communities with a large proportion of non-English speaking residents, the reports should, at a minimum, contain some statement in the appropriate language alerting customers to the importance of the report. Some commenters objected to this requirement, arguing that it would be difficult for systems to ascertain what was a large proportion of non-English speaking residents. EPA agrees and in § 141.153(h)(3) the final rule provides that the primacy agency must determine when a population of non-English speakers is sufficiently large to require systems to take special measures for these residents.

# D. Required Health Information and Rationale

The Agency proposed at § 141.154(a) that all consumer confidence reports include a statement that some people may be more vulnerable to contaminants in drinking water than the general population. The statement

identified several categories of people who may be particularly at risk from infections, and encouraged them to seek advice from their health providers. It further informed people that EPA/CDC guidelines on appropriate means to lessen the risk of infection from *Cryptosporidium* can be obtained from the EPA Safe Drinking Water Hotline and provided the number, as required by section 1414(c)(4)(A).

Commenters were generally supportive of this statement and § 141.154(a) is promulgated as proposed, with the clarification that the CDC guidelines pertain to "other microbial contaminants" as well as *Cryptosporidium*.

As discussed in section III of this preamble, the regulations require additional educational material for three contaminants if they are detected above 50% of the MCL (arsenic and nitrates) or above the action level in more than 5% of homes sampled (lead). These requirements are codified at § 141.154(b), (c), and (d), respectively.

### E. Report Delivery and Recordkeeping

In response to comments, some minor modifications have been made to this section. First, commenters argued that as written, § 141.155(a) implied that systems could use only the U.S. Postal Service to deliver reports to customers. EPA agrees that other means of delivering the reports could be used as long as reports get into customers' homes. For example, a system's water meter readers could deliver the reports. Therefore, the regulations now state in § 141.155(a) that reports must be mailed or otherwise directly delivered to the customer.

In proposed § 141.155(a), EPA also proposed that systems make a good faith effort to reach consumers who do not get water bills. The Agency discussed its reasons for incorporating flexibility in this provision and included in the proposal examples of what such good faith efforts might be: posting on the Internet, publication of the report in subdivision newsletters, asking landlords to post reports in conspicuous places. The proposal left to the State the discretion to recommend specific means of delivery. Many commenters argued that this was insufficient and that EPA should mandate specific requirements designed to reach all consumers.

The Agency strongly supports the right of all consumers to know about the quality of their drinking water and continues to believe that the means to reach consumers must be tailored to specific situations and cannot be mandated at the Federal level.

Therefore, § 141.155(b) does not

prescribe specific means for reaching customers. However, to ensure that systems are aware of the variety of means at their disposition, EPA has clarified in the final rule what it considers an adequate good faith effort and has provided a menu of options from which the systems must select the most appropriate means to reach their consumers.

The Agency believes that flexibility in these provisions is essential because it will take some time for EPA, States, and utilities working as partners to assess the efficacy of various good faith efforts. The Agency believes that this assessment can be achieved through voluntary means. It will require some information gathering by the States regarding how systems are implementing this provision. EPA also assumes that some systems will attempt to assess how effective their efforts are. EPA believes that this evaluation, which can be achieved through guidance after the rule is in place, could lead to more effective use of State and water system resources.

In addition, based on comments received regarding the possible use of the Internet to reach consumers and the public at large, the regulations now require in § 141.155(f) that systems serving 100,000 or more people post their current year's report on the Internet. These systems serve almost 50% of the population served by community water systems and several of these larger systems already post their reports on the Internet. In addition, EPA will work with the States to make reports of systems serving more than 10,000 people available on the Internet within the next few years. Eventually, EPA expects that reports on the water consumed by more than 90% of persons served by community water systems will be readily available through the Internet. This would allow most consumers to go to their public library and have access to information from the variety of systems whose water they may consume.

EPA will also work with the systems to ensure that the reports placed on the Internet are accessible through EPA's drinking water web site (www.epa.gov/ safewater). EPA's site provides educational background on many of the report's terms and concepts. It offers resources such as fact sheets on drinking water regulations and on the potential health effects of each regulated contaminant. The site provides e-mail and telephone links so that consumers can get answers to individual questions. A state-by-state listing will provide information on the source water assessments referred to in the reports.

Other EPA web sites, such as Surf Your Watershed and the Index of Watershed Indicators, give consumers access to enormous amount of data and information about source water. Beginning in late 1999, the web site will also provide access to EPA's National Contaminant Occurrence Database which will contain information regarding contaminants detected in source water and finished water.

Some commenters suggested that a deadline be included in the regulations for mailing of the report to the State. The Agency agrees, so § 141.155(c) provides that reports be mailed to the State at the same time that they are distributed to customers, followed within three months by a certification that reports were distributed, and that the information contained in the reports is correct and consistent with previously submitted data.

Section 141.155(c) of the proposal would have required a water system to mail a copy of its consumer confidence report to any other agency in the State with jurisdiction over community water systems. This could include public utility 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 authorized the State Director to designate any other agencies or clearinghouses to which he could require that systems send copies of their reports. Commenters argued that systems, particularly small systems, may routinely deal only with the primacy agency and not know of the other agencies listed in the proposal. EPA agrees, and the final regulations provide that systems need only mail additional copies of the report if required by the primacy agency.

Finally, as suggested by commenters, the Agency has added a five-year recordkeeping requirement for these reports § 141.155(h).

F. Special State Implementation and Primacy Requirements, and Rationale

Several commenters objected to EPA's proposal that States must adopt the requirements promulgated today (or alternative requirements as provided by § 141.151) in order to maintain primacy. These commenters based their rationale on the fact that the consumer confidence reports are not considered National Primary Drinking Water Regulations (NPDWRs) under the

statute. EPA agrees that these regulations are not NPDWRs as defined under SDWA section 1401. However, EPA believes that it can require States to adopt these requirements under the authority of section 1413(a)(2) which requires States to adopt and implement adequate procedures for enforcement of NPDWRs. EPA believes that these reports contain data which provide the public with information which can be used to promote compliance with the regulations. Moreover, these reports are required under section 1414 of the SDWA which is the enforcement provision of the Act for the public water supply supervision program. EPA believes therefore that Congress intended these reports to be treated as necessary for enforcement pursuant to section 1413(a)(2), similar to public notification requirements (also under section 1414) which EPA has treated as a primacy requirement under section 1413(a)(2). Therefore, EPA is promulgating § 142.16(f) as proposed.

The proposed regulation included a provision § 142.16(f)(2) that would have given States two options in discharging their responsibility to make reports available to the public. They could keep the reports themselves, or simply maintain a list of operators' phone numbers which could be provided to the public.

Many States objected to having to serve as clearinghouses for these reports. They argued that the certification required by § 141.155(c) would be sufficient for ascertaining compliance with these regulations. They also argued that maintaining the reports would require manpower and filing space. Some States also objected to the requirement that they maintain a list of operators' telephone numbers. Most believed that it was unnecessary because they already have such lists, but others said that it would be burdensome.

Most members of the public who submitted comments believed, however, that easy access to reports by all members of the public was an essential element of any right-to-know regulation. Their comments were echoed by consumer advocates who requested a national clearinghouse.

Based on all the comments received, EPA now believes that it is important for the States to maintain copies of the reports for two reasons. First, the Agency is convinced that there must be some access provided to the general public to reports other than from their own system. People with special needs may need to know about drinking water quality in other parts of the country when they travel, or might want to

check a report from another part of the country when planning a move. Second, EPA believes that States themselves would want to have easy access to the reports in order to make decisions on how to exercise their flexibility to adopt alternative requirements, and in order to seek good new ideas for the reports. EPA is therefore requiring at § 142.16(f)(2) that States make reports available to the public upon request and at § 142.16(f)(3) that States maintain a copy of the reports for one year. This does not mean that all reports must be housed in one central location. Large States with field offices could maintain the reports in those offices. States could also arrange with an independent clearinghouse to make the reports available to the public. The option that States maintain lists of the operators' telephone numbers has been deleted.

Some commenters asked for clarification regarding implementation of the regulations during the interim period between effective date of the federal requirements and effective date of State requirements. During this interim period, EPA must enforce the regulation in lieu of the States; however, the systems will submit their reports to the primacy agency. Therefore, a provision has been added in § 142.16(f)(4) which clarifies that States must report violations to EPA so that EPA can take enforcement action as appropriate. Note that EPA interprets its regulations on primacy State reporting at § 142.14(a) to require reporting of CCR violations. The term "national primary drinking water regulations" in that section refers generally to the regulations EPA has codified in 40 CFR part 141 (entitled National Primary Drinking Water Regulations), including today's regulations, rather than the somewhat narrower use of the term "primary drinking water regulation" under section 1401 of SDWA. Today's rule at § 142.16(f)(4) is intended merely to clarify the intent of § 142.15(a)(1) with respect to consumer confidence reporting.

G. Health Effect Language and Rationale

In appendix B of the proposal, EPA included brief statements on health concerns of regulated contaminants to be used when systems reported detections in violation of NPDWRs. The Agency indicated that the language in proposed appendix B was a distillation of information contained in EPA fact sheets, which were included in the docket for this rulemaking. EPA requested comment on the accuracy and adequacy of this language. EPA also tested some of these statements with the focus groups. In general, comments

were supportive and most members of the focus groups formed correct opinions regarding the relative risk of the various scenarios presented to them. Therefore, EPA is promulgating appendix B, now titled appendix C, as proposed with some minor modifications.

First, several commenters were concerned that the statements overstated risk and did not clearly convey that the basis for contaminant standard-setting is a probability that certain effects might occur in certain people, not a certainty. The statements now start with the words "some people" rather than "people" to convey the probabilistic nature of the standard-setting process.

Some commenters also asked for clarification regarding the words "well in excess of the MCL" used in some of the statements. In the proposal, EPA used these words to differentiate between carcinogens and chronic contaminants for which MCLs are set with a substantial margin of safety. EPA has reviewed this margin of safety and is keeping the words "well in excess" only for contaminants for which the MCL is at least a thousand times lower than the level at which there have been any observed health effects.

Some commenters disputed the accuracy of some of the health effects noted for some contaminants. As suggested by a commenter, EPA has

reviewed the health effects noted in EPA's Integrated Risk Information System (IRIS), which is a peer-reviewed compilation of the latest health information regarding contaminants. The Agency made some changes based on this information. It should be noted, however, that appendix C does not, and is not intended to, catalog all possible health effects for each contaminant. Rather, it is intended to inform consumers of the most significant and probable health effects associated with the contaminant in drinking water.

Based on comments received, EPA has also removed the reference to cancer for any Group C ("possible") carcinogen. EPA believes that the evidence of cancer for any of these contaminants is too weak to warrant inclusion in appendix C. All contaminant-specific changes are explained in detail in the comment-response document included in the docket for this rule.

#### V. Cost of the Rule

EPA estimated the costs of complying with the requirements of the proposed rule and described the results of that analysis in the background information for the proposed rule (63 FR 7618–7619). EPA has adjusted its estimate to account for additional requirements added in the final rule: That systems store a copy of the report for five years after distributing it, and that systems

serving 100,000 or more people place their CCR on the Internet.

The costs of complying with the rule were evaluated 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 postage.

Based on its analysis, the Agency estimates the annual 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 in this rule) is \$20,807,555. EPA estimates that the average cost per system is approximately \$442.

### COST SUMMARY TABLE

| Some figures do not add because of rounding  | Number of systems | Average<br>labor hours<br>per system | Average labor cost per system    | Other costs<br>per system<br>(e.g., post-<br>age) | Total cost<br>for size cat-<br>egory                            |
|--|-------------------|--------------------------------------|----------------------------------|---|---|
| Systems serving ≤ 500         Systems serving 501–3,300         Systems serving 3,301–10,000         Systems serving 10,001–50,000         Systems serving ≥ 100,000 | 2,319             | 4.9<br>13.5<br>19.5<br>24.6<br>25.1  | \$49<br>135<br>468<br>787<br>803 | \$0.35<br>248<br>816<br>2,301<br>2,644            | \$1,346,815<br>4,968,334<br>4,983,712<br>8,349,790<br>1,158,904 |
| Total for all Systems  Total State or Primacy Agency Cost  Cost of rule  |                   |                                      |                                  |   | 20,807,555<br>2,784,692<br>23.592,247                           |

EPA recognizes that these cost estimates may appear understated to many commenters. These commenters stressed several factors that they believed EPA had overlooked or significantly underestimated, including some factors that have been discussed earlier, such as the need to report on multiple sources of water. In particular, however, two important trends emerged in the comments.

One trend was represented by several commenters from very small systems,

who argued that any CCR would be a financial burden to them. In addition to ignoring the Congressional mandate for the CCR, however, such commenters also frequently overlooked key factors that will affect the costs to small systems. These factors include, first, the statutory and regulatory provisions for waiver of delivery requirements for such systems. EPA did not receive any indications in the comments submitted on the proposed rule that State Governors would not make the

necessary findings and certifications to allow the smallest systems to post their CCRs rather than deliver them to each customer, or that small systems would not be allowed to adopt alternatives to mail delivery. Therefore, the Agency's estimates reflect a significant use of alternative means of distribution by small systems. Second, EPA anticipates that the burden of preparation of the CCR for small systems will be substantially lessened by use of report templates, which will enable small

systems to avoid the costs of graphically designing reports; looking up and copying information, such as health effects language or typical sources of contamination; and calculating the conversions necessary to report detections in the form called for by the rule. Such templates will be made available by EPA and by trade associations representing water supply systems, and the Agency has reflected the widespread use of such templates in its estimates. In addition, EPA expects that small systems will receive assistance and support from State primacy agencies in collecting and interpreting data.

The second trend was represented by commenters from larger systems, many of which already prepare and distribute various reports to their customers. They frequently suggested that use of professional graphic designers, use of multicolor printing, use of multiple pages for reports, and delivery to larger numbers of customers than incorporated into the EPA's cost estimate would lead to higher costs than those developed for this proposed rule. EPA recognizes that larger systems, in particular, may wish to develop CCRs that have very high graphic qualities that appeal to wide audiences, and certainly does not want to inhibit systems from making their CCRs as appealing as possible. In such cases, EPA recognizes, the costs of preparation and delivery of the CCR will be greater than those estimated for this

The purpose of the estimate provided in this rule, however, is to indicate the minimum cost that might be incurred by a system to comply with the Congressional and regulatory requirements. This approximation of the true cost of the regulations, as such, does not include the cost of embellishments that systems may reasonably find desirable but are not required. Contrary to the assumptions of some commenters, no costs of testing source water are properly attributable to the costs of complying with the CCR rule. EPA notes that even some large metropolitan water systems have succeeded in preparing clear and appealing water quality reports that can be placed on a single sheet of paper; that do not rely on multicolor printing but are nevertheless graphically distinctive; and that can be delivered without the very substantial increases in postage costs suggested as necessary by some commenters. Therefore, taking the "bare bones" nature of the CCR, as well as the tools that will be available for its production and the special procedures that will be allowed for its distribution by small systems, EPA considers that its

estimated costs of compliance are adequate.

#### 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.

Pursuant to the terms of Executive Order 12866, it has been determined that this rule is a "significant regulatory action." Therefore, EPA submitted this action to OMB for review. Substantive changes made in response to OMB suggestions or recommendations are 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. Under the RFA, 5 U.S.C. 601 et seq., an agency must prepare a regulatory flexibility analysis (RFA) 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 a RFA.

ÉPA has determined that this 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 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 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 one percent of sales for small businesses and less than one percent of revenues for small governments. 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 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 a Regulatory Flexibility Analysis. 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; and incorporating procedures by which small systems can make reports available to their customers by methods other than mailing. Further, the Agency notes that in general the regulations issued under SDWA place a lesser burden on small systems, for example, for most regulated contaminants, small systems have to collect fewer samples. Therefore, small systems operators will have significantly less information to report in consumer confidence reports.

## 2. Use of Alternative Definition

As discussed at length in the preamble to the proposed rule, EPA is defining, for the purposes of this rule-making, a "small entity" as a public water system that serves 10,000 or fewer people. In the proposal, EPA requested comments on the issue. The Agency's review of those comments showed that stakeholders support the proposed definition. The SBA Office of Advocacy agreed with the Agency's choice of systems serving 10,000 or fewer people for an alternative small business definition for this rulemaking. EPA

intends to define "small entity" in the same way for regulatory flexibility assessments under the RFA for all future drinking water regulations.

#### 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, OP 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 approximately 460,000 hours at an annual cost of \$20,807,555. The estimated number of respondents is 47,040 community water systems. The frequency of responses is annual. The average burden per response is approximately 10 hours. 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

Send comments 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 to the Director, OPPE Regulatory Information Division; U.S. **Environmental Protection Agency** (2137), 401 M St., SW., Washington, DC 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th St., NW., Washington, DC 20503, marked "Attention: Desk Officer for EPA." Comments are requested within September 18, 1998. Include the ICR number in any correspondence.

# D. Enhancing the Intergovernmental Partnership

Unless the Federal government provides funds for State, local, or Tribal governments to pay the direct costs of implementing a Federal mandate upon them, Executive Order 12875, "Enhancing Intergovernmental Partnerships," October 26, 1993, requires an agency to consult with State, tribal, and local entities in the development of rules that will affect them, provide OMB a description of the issues raised, and provide an Agency statement supporting the need to issue the regulation. 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 costeffective 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.

EPA has determined that this rule does not contain a Federal mandate that may result in expenditures of \$100 million or more for State, local, and tribal governments in the aggregate, or the private sector, in any one year. Thus, today's rule is not subject to the requirements of sections of 202 and 205 of the UMRA. This rule will establish requirements that affect small community water systems. However, EPA has determined that this rule contains no regulatory requirements that might significantly or uniquely affect small governments because the regulation requires minimal expenditure of resources. Thus, this rule is not subject to the requirements of section 203 of UMRA.

### 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 portion of the population, as determined by the Primacy Agency, 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

On April 23, 1997, the President issued Executive Order 13045, entitled Protection of Children from Environmental Health Risks and Safety Risks (62 FR 1988). A "covered regulatory action" is defined in section 2-202 as a substantive action in a rulemaking that (a) is likely to result in a rule that may be "economically significant" under Executive Order 12866 and (b) concerns an environmental health risk or safety risk that an agency has reason to believe may disproportionally affect children. If the regulatory action meets both criteria, the Agency must evaluate the environmental health or safety effects of the planned rule on children and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the Agency. This rule is not a "covered regulatory action" as defined in the Order because it is not economically significant (see section V above). EPA believes, however, that the rule has the potential to reduce risks to children.

This regulation on consumer confidence reports addresses the particular risks that certain contaminants in drinking water may pose to children. The regulation requires that the reports include additional information aimed at parents of young children when lead or nitrates are detected in a system's water above certain levels. The health effects language provided in appendix C of the rule identifies risks to infants and children from drinking water containing lead, nitrate, or nitrite in excess of specified levels.

### 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 activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., materials specifications, test methods, sampling procedures, business practices, etc.) that are developed or adopted by voluntary consensus 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 rule 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.

# I. Submission to Congress and the General Accounting Office

The Congressional Review Act. 5 U.S.C. 801 et seq., as added by the Small **Business Regulatory Enforcement** Fairness Act of 1998, generally provides that before a rule may take effect, the Agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the Federal Register. This rule is not a major rule as defined by 5 U.S.C. 804(2). This rule will be effective on September 18. 1998. For judicial review purposes, the effective date and time of this final rule is 1 p.m. eastern time on September 2, 1998, as provided in 40 CFR 23.7.

# 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: August 11, 1998.

#### Carol M. Browner,

Administrator.

For the reasons set out in the preamble, 40 CFR parts 141 and 142 are amended as follows:

# PART 141—[AMENDED]

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 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 additional health information.

141.155 Report delivery and recordkeeping. Appendix A to Subpart O—Converting MCL Compliance Values for Consumer Confidence Reports

Appendix B to Subpart O—Regulated Contaminants

Appendix C to Subpart O—Health Effects 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 detected 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 service connections to which water is delivered by a community water system.
- (d) For the purpose of this subpart, detected means: at or above the levels prescribed by § 141.23(a)(4) for inorganic contaminants, at or above the levels prescribed by § 141.24(f)(7) for the contaminants listed in § 141.61(a), at or above the level prescribed by § 141.24(h)(18) for the contaminants listed in § 141.61(c), and at or above the levels prescribed by § 141.25(c) for radioactive contaminants.
- (e) 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, and must be designed to achieve an equivalent level of public information and education as would be achieved under this subpart.
- (f) For purpose of §§ 141.154 and 141.155 of this subpart, the term "primacy agency" refers to the State or tribal government entity that has jurisdiction over, and primary enforcement responsibility for, public water systems, even if that government does not have interim or final primary

enforcement responsibility for this rule. Where the State or tribe does not have primary enforcement responsibility for public water systems, the term "primacy agency" refers to the appropriate EPA regional office.

#### §141.152 Effective dates.

(a) The regulations in this subpart shall take effect on September 18, 1998.

(b) Each existing community water system must deliver its first report by October 19, 1999, its second report by July 1, 2000, and subsequent reports by July 1 annually thereafter. The first report must contain data collected during, or prior to, calendar year 1998 as prescribed in § 141.153(d)(3). Each report thereafter must contain data collected during, or prior to, the previous calendar year.

(c) A new community water system must deliver its first report by July 1 of the year after its first full calendar year in operation and annually thereafter.

- (d) A community water system that sells water to another community water system must deliver the applicable information required in § 141.153 to the buyer system:
- (1) No later than April 19, 1999, by April 1, 2000, and by April 1 annually thereafter or
- (2) On a date mutually agreed upon by the seller and the purchaser, and specifically included in a contract between the parties.

#### §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, ground water; 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. In addition, systems are encouraged to highlight in the report significant sources of contamination in the source water area if they have readily available information. Where a system has received a source water assessment from the primacy agency, the report must include a brief summary of the system's susceptibility to potential sources of contamination, using language provided by the primacy agency or written by the operator.

- (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. MCLGs allow for a margin of safety.
- (ii) Maximum Contaminant Level or MCL: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
- (2) A report for a community water system operating under a variance or an exemption issued under § 1415 or 1416 of SDWA must include the following definition: *Variances and Exemptions:* State or EPA 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 one or both of the following definitions as applicable:
- (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, if exceeded, triggers treatment or other requirements which a water system must follow.
- (d) Information on Detected Contaminants.
- (1) This sub-section specifies the requirements for information to be included in each report for contaminants subject to mandatory monitoring (except *Cryptosporidium*). It applies to:
- (i) Contaminants subject to an MCL, action level, or treatment technique (regulated contaminants);
- (ii) Contaminants for which monitoring is required by § 141.40 (unregulated contaminants); and
- (iii) Disinfection by-products or microbial contaminants for which monitoring is required by §§ 141.142 and 141.143, except as provided under paragraph (e)(1) of this section, and which are detected in the finished water.
- (2) The data relating to these contaminants must be displayed in one table or in several adjacent tables. Any additional monitoring results which a community water system chooses to include in its report must be displayed separately.
- (3) The data must be derived from data collected to comply with EPA and State monitoring and analytical requirements during calendar year 1998 for the first report and subsequent calendar years thereafter except that:

- (i) Where a system is allowed to monitor for regulated contaminants less often than once a year, the table(s) must include the date and results of the most recent sampling and the report must include a brief statement indicating that the data presented in the report are from the most recent testing done in accordance with the regulations. No data older than 5 years need be included.
- (ii) Results of monitoring in compliance with §§ 141.142 and 141.143 need only be included for 5 years from the date of last sample or until any of the detected contaminants becomes regulated and subject to routine monitoring requirements, whichever comes first.
- (4) For detected regulated contaminants (listed in appendix A to this subpart), the table(s) must contain:
- (i) The MCL for that contaminant expressed as a number equal to or greater than 1.0 (as provided in appendix A to this subpart);

(ii) The MCLG for that contaminant expressed in the same units as the MCL;

- (iii) If there is no MCL for a detected contaminant, the table must indicate that 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/or action level, as appropriate, specified in paragraph(c)(3) of this section;
- (iv) For contaminants subject to an MCL, except turbidity and total coliforms, the highest contaminant level used to determine compliance with an NPDWR and the range of detected levels, as follows:
- (A) When compliance with the MCL is determined annually or less frequently: The highest detected level at any sampling point and the range of detected levels expressed in the same units as the MCL.
- (B) When compliance with the MCL is determined by calculating a running annual average of all samples taken at a sampling point: the highest average of any of the sampling points and the range of all sampling points expressed in the same units as the MCL.
- (C) When compliance with the MCL is determined on a system-wide basis by calculating a running annual average of all samples at all sampling points: the average and range of detection expressed in the same units as the MCL.

Note to paragraph (d)(4)(iv): When rounding of results to determine compliance with the MCL is allowed by the regulations, rounding should be done prior to multiplying the results by the factor listed in appendix A of this subpart;

(v) For turbidity.

(A) When it is reported pursuant to § 141.13: The highest average monthly value.

(B) When it is reported pursuant to the requirements of § 141.71: the highest monthly value. The report should include an explanation of the reasons

for measuring turbidity.

(C) When it is reported pursuant to § 141.73: The highest single measurement and the lowest monthly percentage of samples meeting the turbidity limits specified in § 141.73 for the filtration technology being used. The report should include an explanation of the reasons for measuring turbidity;

(vi) For lead and copper: the 90th percentile value of the most recent round of sampling and the number of sampling sites exceeding the action

level;

(vii) For total coliform:

(A) The highest monthly number of positive samples for systems collecting fewer than 40 samples per month; or

(B) The highest monthly percentage of positive samples for systems collecting at least 40 samples per month;

(viii) For fecal coliform: The total number of positive samples; and

- (ix) The likely source(s) of detected contaminants to the best of the operator's knowledge. Specific information regarding contaminants may be available in sanitary surveys and source water assessments, and should be used when available to the operator. If the operator lacks specific information on the likely source, the report must include one or more of the typical sources for that contaminant listed in appendix B to this subpart which are most applicable to the system.
- (5) If a community water system distributes water to its customers from multiple hydraulically independent distribution systems that are fed by different raw water sources, the table should contain a separate column for each service area and the report should identify each separate distribution system. Alternatively, systems could produce separate reports tailored to include data for each service area.
- (6) The table(s) must clearly identify any data indicating violations of MCLs or treatment techniques 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 C to this subpart.

(7) For detected unregulated contaminants for which monitoring is required (except Cryptosporidium), the

table(s) must contain the average and range at which the contaminant was detected. The report may include a brief explanation of the reasons for monitoring for unregulated contaminants.

(e) Information on Cryptosporidium, radon, and other contaminants:

- (1) If the system has performed any monitoring for Cryptosporidium, including monitoring performed to satisfy the requirements of § 141.143, 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; and
- (ii) An explanation of the significance of the results.
- (2) 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; and

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

- (3) 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.

- (f) Compliance with NPDWR. In addition to the requirements of § 141.153(d)(7), the report must note any violation that occurred during the year covered by the report of a requirement listed below, and 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.
- (1) Monitoring and reporting of compliance data;
- (2) Filtration and disinfection prescribed by subpart H of this part. For systems which have failed to install adequate filtration or disinfection equipment or processes, or have had a failure of such equipment or processes which constitutes a violation, the report must include the following language as

part of the explanation of potential adverse health effects: Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

(3) Lead and copper control requirements prescribed by subpart I of this part. For systems which fail to take one or more actions prescribed by §§ 141.80(d), 141.81, 141.82, 141.83 or 141.84, the report must include the applicable language of appendix C to this subpart for lead, copper, or both.

(4) Treatment techniques for Acrylamide and Epichlorohydrin prescribed by subpart K of this part. For systems which violate the requirements of subpart K of this part, the report must include the relevant language from appendix C to this subpart.

(5) Recordkeeping of compliance data.

(6) Special monitoring requirements prescribed by §§ 141.40 and 141.41; and

(7) Violation of the terms of a variance, an exemption, or an administrative or judicial order.

- (g) Variances and Exemptions. If a system is operating under the terms of a variance or an exemption issued under § 1415 or 1416 of SDWA, 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, or renewal, of the variance or exemption.
  - (h) Additional information:
- (1) The report 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 (h)(1) (i) through (iii) or systems may use their own comparable language. The report also must include the language of paragraph (h)(1)(iv) 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, in some cases, 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) Microbial 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 stormwater runoff, 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, urban stormwater runoff, and residential uses.

- (D) Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- (E) Radioactive contaminants, 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 which must provide the same protection for public health.
- (iv) Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. 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 community water system as a source of additional information concerning the report.
- (3) In communities with a large proportion of non-English speaking residents, as determined by the Primacy Agency, the report must contain information in the appropriate language(s) regarding the importance of the 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 report must include 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 additional 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. Immunocompromised 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 and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).
- (b) A system which detects arsenic at levels above 25 "µg/l, but below the MCL:
- (1) Must include in its report a short informational statement about arsenic, using language such as: EPA is reviewing the drinking water standard for arsenic because of special concerns that it may not be stringent enough. Arsenic is a naturally-occurring mineral known to cause cancer in humans at high concentrations.
- (2) May write its own educational statement, but only in consultation with the Primacy Agency.
- (c) A system which detects nitrate at levels above 5 mg/l, but below the MCL:
- (1) Must include a short informational statement about the impacts of nitrate on children using language such as:
  Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.
- (2) May write its own educational statement, but only in consultation with the Primacy Agency.
- (d) Systems which detect lead above the action level in more than 5%, but fewer that 10%, of homes sampled:
- (1) Must include a short informational statement about the special impact of lead on children using language such as: Infants and young children are typically

more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (800–426–4791).

(2) May write its own educational statement, but only in consultation with the Primacy Agency.

# § 141.155 Report delivery and recordkeeping.

- (a) Except as provided in paragraph (g) of this section, each community water system must mail or otherwise directly deliver one copy of the report to each customer.
- (b) The system must make a good faith effort to reach consumers who do not get water bills, using means recommended by the primacy agency. EPA expects that an adequate good faith effort will be tailored to the consumers who are served by the system but are not bill-paying customers, such as renters or workers. A good faith effort to reach consumers would include a mix of methods appropriate to the particular system such as: Posting the reports on the Internet; mailing to postal patrons in metropolitan areas; advertising the availability of the report in the news media; publication in a local newspaper; posting in public places such as cafeterias or lunch rooms of public buildings; delivery of multiple copies for distribution by single-biller customers such as apartment buildings or large private employers; delivery to community organizations.
- (c) No later than the date the system is required to distribute the report to its customers, each community water system must mail a copy of the report to the primacy agency, followed within 3 months by 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 primacy agency.
- (d) No later than the date the system is required to distribute the report to its customers, each community water system must deliver the report to any other agency or clearinghouse identified by the primacy agency.
- (e) Each community water system must make its reports available to the public upon request.
- (f) Each community water system serving 100,000 or more persons must

post its current year's report to a publicly-accessible site on the Internet.

- (g) The Governor of a State or his designee, 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 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
- requirement of § 141.155(a) 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 (g)(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.
- (h) Any system subject to this subpart must retain copies of its consumer confidence report for no less than 5 years.

## Appendix A to Subpart O-Converting MCL Compliance Values for Consumer Confidence Reports

Key

AL=Action Level
MCL=Maximum Contaminant Level
MCLG=Maximum Contaminant Level Goal
MFL=million fibers per liter
mrem/year=millirems per year (a measure of radiation absorbed by the body)
NTU=Nephelometric Turbidity Units
pCi/l=picocuries per liter (a measure of radioactivity)
ppm=parts per million, or milligrams per liter (mg/l)
ppb=parts per billion, or micrograms per liter (µg/l)
ppt=parts per trillion, or nanograms per liter
ppq=parts per quadrillion, or picograms per liter
TT=Treatment Technique

| Contaminant   | MCL in compliance units (mg/L) | multiply by | MCL in CCR units                                | MCLG in CCR units |
|---|--------------------------------|-------------|---|-------------------|
| Microbiological Contaminants  |                                |             |   |                   |
| 1. Total Coliform Bacteria  |                                |             | Presence of coliform bacteria in ≥5% of monthly | 0                 |
|   |                                |             | samples.  |                   |
| 2. Fecal coliform and E. coli   |                                |             | A routine sample and a                          | 0                 |
|   |                                |             | repeat sample are total                         |                   |
|   |                                |             | coliform positive, and one is also fecal coli-  |                   |
|   |                                |             | form or E. coli positive.                       |                   |
| 3. Turbidity  |                                |             | TT (NTU)  | n/a               |
| Radioactive Contaminants  |                                |             |   |                   |
| 4. Beta/photon emitters   | 4 mrem/yr                      |             | 4 mrem/yr                                       | 0                 |
| 5. Alpha emitters   | 15 pCi/l                       |             | 15 pCi/l  | Ö                 |
| 6. Combined radium  | 5 pCi/l                        |             | 5 pCi/l   | 0                 |
| Inorganic Contaminants  |                                |             |   |                   |
| 7. Antimony   | .006                           | 1000        | 6 ppb   | 6                 |
| 8. Arsenic  | .05                            | 1000        | 50 ppb  | n/a               |
| 9. Asbestos   | 7 MFL                          |             | 7 MFL   | 7                 |
| 10. Barium  | 2                              |             | 2 ppm   | 2                 |
| 11. Beryllium   | .004                           | 1000        | 4 ppb   | 4                 |
| 12. Cadmium   | .005                           | 1000        | 5 ppb   | 5                 |
| 13. Chromium  | .1<br>AL=1.3                   | 1000        | 100 ppb   | 100               |
| 14. Copper  | .2                             | 1000        | AL=1.3 ppm                                      | 200               |
| 16. Fluoride  | 4                              | 1000        | 4 ppm   | 4                 |
| 17. Lead  |                                | 1000        | AL=15 ppb                                       | o o               |
| 18. Mercury (inorganic)   |                                | 1000        | 2 ppb   | 2                 |
| 19. Nitrate (as Nitrogen)   |                                |             | 10 ppm  | 10                |
| 20. Nitrite (as Nitrogen)   | 1                              |             | 1 ppm   | 1                 |
| 21. Selenium  | .05                            | 1000        | 50 ppb  | 50                |
| 22. Thallium  | .002                           | 1000        | 2 ppb   | 0.5               |
| Synthetic Organic Contaminants including<br>Pesticides and Herbicides |                                |             |   |                   |
| 23. 2.4-D   | .07                            | 1000        | 70 ppb  | 70                |
| 24. 2,4,5-TP [Silvex]   |                                | 1000        | 50 ppb  | 50                |
| 25. Acrylamide  |                                |             | TT  | 0                 |
| 26. Alachlor  |                                | 1000        | 2 ppb   | 0                 |
| 27. Atrazine  | .003                           | 1000        | 3 ppb   | 3                 |
| 28. Benzo(a)pyrene [PAH]  |                                | 1,000,000   | 200 ppt   | 0                 |
| 29. Carbofuran  | .04                            | 1000        | 40 ppb  | 40                |

| Contaminant                          | MCL in compliance units (mg/L) | multiply by   | MCL in CCR units | MCLG in CCR units |  |
|--------------------------------------|--------------------------------|---------------|------------------|-------------------|--|
| 30. Chlordane                        | .002                           | 1000          | 2 ppb            | 0                 |  |
| 31. Dalapon                          | .2                             | 1000          | 200 ppb          | 200               |  |
| 32. Di(2-ethylhexyl)adipate          | .4                             | 1000          | 400 ppb          | 400               |  |
| 33. Di(2-ethylhexyl) phthalate       | .006                           | 1000          | 6 ppb            | 0                 |  |
| 34. Dibromochloropropane             | .0002                          | 1,000,000     | 200 ppt          | 0                 |  |
| 35. Dinoseb                          | .007                           | 1000          | 7 ppb            | 7                 |  |
| 36. Diquat                           | .02                            | 1000          | 20 ppb           | 20                |  |
| 37. Dioxin [2,3,7,8-TCDD]            | .00000003                      | 1,000,000,000 | 30 ppq           | 0                 |  |
| 38. Endothall                        | .1                             | 1000          | 100 ppb          | 100               |  |
| 39. Endrin                           | .002                           | 1000          | 2 ppb            | 2                 |  |
| 40. Epichlorohydrin                  |                                |               | TT               | 0                 |  |
| 41. Ethylene dibromide               | .00005                         | 1,000,000     | 50 ppt           | 0                 |  |
| 42. Glyphosate                       | .7                             | 1000          | 700 ppb          | 700               |  |
| 43. Heptachlor                       | .0004                          | 1,000,000     | 400 ppt          | 0                 |  |
| 44. Heptachlor epoxide               | .0002                          | 1,000,000     | 200 ppt          | 0                 |  |
| 45. Hexachlorobenzene                | .001                           | 1000          | 1 ppb            | Ö                 |  |
| 46. Hexachloro-cyclopentadiene       | .05                            | 1000          | 50 ppb           | 50                |  |
| 47. Lindane                          | .0002                          | 1,000,000     | 200 ppt          | 200               |  |
| 48. Methoxychlor                     | .04                            | 1000          | 40 ppb           | 40                |  |
| 49. Oxamyl [Vydate]                  | .2                             | 1000          | 200 ppb          | 200               |  |
| 50. PCBs [Polychlorinated biphenyls] | .0005                          | 1,000,000     | 500 ppt          | 200               |  |
|                                      |                                |               |                  | 0                 |  |
| 51. Pentachlorophenol                | .001                           | 1000          | 1 ppb            | 500               |  |
| 52. Picloram                         |                                | 1000          | 500 ppb          |                   |  |
| 53. Simazine                         | .004                           | 1000          | 4 ppb            | 4                 |  |
| 54. Toxaphene                        | .003                           | 1000          | 3 ppb            | U                 |  |
| Volatile Organic Contaminants        | 005                            | 4000          | 5                |                   |  |
| 55. Benzene                          | .005                           | 1000          | 5 ppb            | 0                 |  |
| 56. Carbon tetrachloride             | .005                           | 1000          | 5 ppb            | 0                 |  |
| 57. Chlorobenzene                    | .1                             | 1000          | 100 ppb          | 100               |  |
| 58. o-Dichlorobenzene                | .6                             | 1000          | 600 ppb          | 600               |  |
| 59. p-Dichlorobenzene                | .075                           | 1000          | 75 ppb           | 75                |  |
| 60. 1,2-Dichloroethane               | .005                           | 1000          | 5 ppb            | 0                 |  |
| 61. 1,1-Dichloroethylene             | .007                           | 1000          | 7 ppb            | 7                 |  |
| 62. cis-1,2-Dichloroethylene         | .07                            | 1000          | 70 ppb           | 70                |  |
| 63. trans-1,2-Dichloroethylene       | .1                             | 1000          | 100 ppb          | 100               |  |
| 64. Dichloromethane                  | .005                           | 1000          | 5 ppb            | 0                 |  |
| 65. 1,2-Dichloropropane              | .005                           | 1000          | 5 ppb            | 0                 |  |
| 66. Ethylbenzene                     | .7                             | 1000          | 700 ppb          | 700               |  |
| 67. Styrene                          | .1                             | 1000          | 100 ppb          | 100               |  |
| 68. Tetrachloroethylene              | .005                           | 1000          | 5 ppb            | 0                 |  |
| 69. 1,2,4-Trichlorobenzene           | .07                            | 1000          | 70 ppb           | 70                |  |
| 70. 1,1,1-Trichloroethane            | .2                             | 1000          | 200 ppb          | 200               |  |
| 71. 1,1,2-Trichloroethane            | .005                           | 1000          | 5 ppb            | 3                 |  |
| 72. Trichloroethylene                | .005                           | 1000          | 5 ppb            | 0                 |  |
| 73. TTHMs [Total trihalomethanes]    | .10                            | 1000          | 100 ppb          | 0                 |  |
| 74. Toluene                          | 1                              |               | 1 ppm            | 1                 |  |
|                                      | 1                              |               | ••               |                   |  |
| 75. Vinyl Chloride                   | .002                           | 1000          | 2 ppb            | 0                 |  |

# Appendix B to Subpart O-Regulated Contaminants

Key

AL=Action Level MCL=Maximum Contaminant Level MCLG=Maximum Contaminant Level Goal MFL=million fibers per liter mrem/year=millirems per year (a measure of radiation absorbed by the body) NTU=Nephelometric Turbidity Units pCi/l=picocuries per liter (a measure of radioactivity) ppm=parts per million, or milligrams per liter (mg/l) ppb=parts per billion, or micrograms per liter (µg/l) ppt=parts per trillion, or nanograms per liter ppq=parts per quadrillion, or picograms per liter TT=Treatment Technique

| Contaminant (units)                                      | MCLG | MCL  | Major sources in drinking water       |
|--|------|--|---------------------------------------|
| Microbiological Contaminants  1. Total Coliform Bacteria | 0    | Presence of coliform bacteria in ≥5% of monthly samples. | Naturally present in the environment. |

| Contaminant (units)   | MCLG     | MCL  | Major sources in drinking water  |
|---|----------|--|--|
| 2. Fecal coliform and <i>E. coli</i>                                  | 0        | A routine sample and a repeat sample are total coliform positive, and one is also fecal coliform or <i>E. coli</i> positive. | Human and animal fecal waste.  |
| 3. Turbidity  | n/a      | TT   | Soil runoff.   |
| 4. Beta/photon emitters (mrem/yr)                                     | 0        | 4  | Decay of natural and man-made deposits.  |
| 5. Alpha emitters (pCi/l)   | 0        | 15   | Erosion of natural deposits.   |
| 6. Combined radium (pCi/l)  Inorganic Contaminants                    | 0        | 5  | Erosion of natural deposits.   |
| 7. Antimony (ppb)   | 6        | 6  | Discharge from petroleum refineries; fire  |
| 8. Arsenic (ppb)  | n/a      | 50   | retardants; ceramics; electronics; solder. Erosion of natural deposits; Runoff from or- chards; Runoff from glass and electronics pro- duction wastes. |
| 9. Asbestos (MFL)   | 7        | 7  | Decay of asbestos cement water mains; Erosion of natural deposits.   |
| 10. Barium (ppm)  | 2        |  | Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.  |
| 11. Beryllium (ppb)   | 4        | 4  | Discharge from metal refineries and coal-burning factories; Discharge from electrical, aerospace, and defense industries.                              |
| 12. Cadmium (ppb)   | 5        | 5  | Corrosion of galvanized pipes; Erosion of natural deposits; Discharge from metal refineries; run-off from waste batteries and paints.                  |
| 13. Chromium (ppb)  | 100      | 100  | Discharge from steel and pulp mills; Erosion of natural deposits.  |
| 14. Copper (ppm)  | 1.3      | AL=1.3   | Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.  |
| 15. Cyanide (ppb)   | 200      | 200  | Discharge from steel/metal factories; Discharge from plastic and fertilizer factories.   |
| 16. Fluoride (ppm)  | 4        | 4  | Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.                             |
| 17. Lead (ppb)  | 0        | AL=15  | Corrosion of household plumbing systems; Erosion of natural deposits.  |
| 18. Mercury [inorganic] (ppb)   | 2        | 2  | Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills; Runoff from cropland.                                     |
| 19. Nitrate [as Nitrogen] (ppm)                                       | 10       | 10   | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.   |
| 20. Nitrite [as Nitrogen] (ppm)                                       | 1        | 1  | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.   |
| 21. Selenium (ppb)  | 50       | 50   | Discharge from petroleum and metal refineries;<br>Erosion of natural deposits; Discharge from<br>mines.  |
| 22. Thallium (ppb)  | 0.5      | 2  | Leaching from ore-processing sites; Discharge from electronics, glass, and drug factories.   |
| Synthetic Organic Contaminants including<br>Pesticides and Herbicides |          |  |  |
| 23. 2,4-D (ppb)   | 70       | 70   | Runoff from herbicide used on row crops.   |
| 24. 2,4,5-TP [Silvex] (ppb)   | 50<br>0  | TT   | Residue of banned herbicide.  Added to water during sewage/wastewater treatment.   |
| 26. Alachlor (ppb)  | 0        | 2  | Runoff from herbicide used on row crops.   |
| 27. Atrazine (ppb)  | 3        | 3  | Runoff from herbicide used on row crops.   |
| 28. Benzo(a)pyrene [PAH] (nanograms/l)                                | 0        | 200  | Leaching from linings of water storage tanks and distribution lines.   |
| 29. Carbofuran (ppb)  | 40       | 40   | Leaching of soil fumigant used on rice and alfalfa.  Residue of banned termiticide.  |
| 30. Chlordane (ppb)   | 0<br>200 | 200  | Residue of banned termiticide. Runoff from herbicide used on rights of way.  |
| 32. Di(2-ethylhexyl) adipate (ppb)                                    | 400      | 400  | Discharge from chemical factories.   |
| 33. Di(2-ethylhexyl) phthalate (ppb)                                  | 0        | 6  | Discharge from rubber and chemical factories.  |
| 34. Dibromochloropropane (ppt)  | 0        | 200  | Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards.   |
| 35. Dinoseb (ppb)   | 7        | 7  | Runoff from herbicide used on soybeans and vegetables.   |
| 36. Diquat (ppb)  | 20       | 20   | Runoff from herbicide use.   |

| Contaminant (units)  | MCLG | MCL | Major sources in drinking water  |
|--|------|-----|--|
| 37. Dioxin [2,3,7,8-TCDD] (ppq)                            | 0    | 30  | Emissions from waste incineration and other combustion; Discharge from chemical factories.     |
| 38. Endothall (ppb)  | 100  | 100 | Runoff from herbicide use.   |
| 39. Endrin (ppb)   | 2    | 2   | Residue of banned insecticide.   |
| 40. Epichlorohydrin  | 0    | TT  | Discharge from industrial chemical factories; An   |
|  |      |     | impurity of some water treatment chemicals.  |
| 41. Ethylene dibromide (ppt)                               | 0    | 50  | Discharge from petroleum refineries.   |
| 42. Glyphosate (ppb)                                       | 700  | 700 | Runoff from herbicide use.   |
| 43. Heptachlor (ppt)                                       | 0    | 400 | Residue of banned termiticide.   |
| 44. Heptachlor epoxide (ppt)                               | 0    | 200 | Breakdown of heptachlor.   |
| 45. Hexachlorobenzene (ppb)                                | 0    | 1   | Discharge from metal refineries and agricultural chemical factories.                           |
| 46. Hexachlorocyclopentadiene (ppb)                        | 50   | 50  | Discharge from chemical factories.   |
| 47. Lindane (ppt)  | 200  | 200 | Runoff/leaching from insecticide used on cattle, lumber, gardens.                              |
| 48. Methoxychlor (ppb)                                     | 40   | 40  | Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, livestock.               |
| 49. Oxamyl [Vydate](ppb)                                   | 200  | 200 | Runoff/leaching from insecticide used on apples,   |
| 50. PCBs [Polychlorinated biphenyls] (ppt)                 | 0    | 500 | potatoes and tomatoes. Runoff from landfills; Discharge of waste chemi-                        |
|  |      |     | cals.  |
| 51. Pentachlorophenol (ppb)                                | 0    | 1   | Discharge from wood preserving factories.  |
| 52. Picloram (ppb)   | 500  | 500 | Herbicide runoff.  |
| 53. Simazine (ppb)   | 4    | 4   | Herbicide runoff.  |
| 54. Toxaphene (ppb)  | 0    | 3   | Runoff/leaching from insecticide used on cotton and cattle.                                    |
| <b>Volatile Organic Contaminants</b>                       |      |     |  |
| 55. Benzene (ppb)  | 0    | 5   | Discharge from factories; Leaching from gas storage tanks and landfills.                       |
| 56. Carbon tetrachloride (ppb)                             | 0    | 5   | Discharge from chemical plants and other industrial activities.                                |
| 57. Chlorobenzene (ppb)                                    | 100  | 100 | Discharge from chemical and agricultural chemical factories.                                   |
| 58. o-Dichlorobenzene (ppb)                                | 600  | 600 | Discharge from industrial chemical factories.  |
| 59. p-Dichlorobenzene (ppb)                                | 75   | 75  | Discharge from industrial chemical factories.  |
| 60. 1,2-Dichloroethane (ppb)                               | 0    | 5   | Discharge from industrial chemical factories.  |
| 61. 1,1-Dichloroethylene (ppb)                             | 7    | 7   | Discharge from industrial chemical factories.  |
| 62. cis-1,2-Dichloroethylene (ppb)                         | 70   | 70  | Discharge from industrial chemical factories.  |
| 63. trans-1,2-Dichloroethylene (ppb)                       | 100  | 100 | Discharge from industrial chemical factories.  |
| 64. Dichloromethane (ppb)                                  | 0    | 5   | Discharge from pharmaceutical and chemical factories.  |
| 65. 1,2-Dichloropropane (ppb)                              | 0    | 5   | Discharge from industrial chemical factories.  |
| 66. Ethylbenzene (ppb)                                     | 700  | 700 | Discharge from petroleum refineries.   |
| 67. Styrene (ppb)  | 100  | 100 | Discharge from rubber and plastic factories;<br>Leaching from landfills.                       |
| 68. Tetrachloroethylene (ppb)                              | 0    | 5   | Leaching from PVC pipes; Discharge from factories and dry cleaners.                            |
| 69. 1,2,4-Trichlorobenzene (ppb)                           | 70   | 70  | Discharge from textile-finishing factories.  |
| 70. 1,1,1-Trichloroethane (ppb)                            | 200  | 200 | Discharge from metal degreasing sites and other  |
| 71 1 1 2-Trichloroethane (nah)                             | 2    | 5   | factories.   |
| 71. 1,1,2-Trichloroethane (ppb)72. Trichloroethylene (ppb) | 3 0  | 5   | Discharge from industrial chemical factories.  Discharge from metal degreasing sites and other |
| - ",   |      |     | factories.   |
| 73. TTHMs [Total trihalomethanes] (ppb)                    | 0    | 100 | By-product of drinking water chlorination.   |
| 74. Toluene (ppm)  | 1    | 1   | Discharge from petroleum factories.  |
| 75. Vinyl Chloride (ppb)                                   | 0    | 2   | Leaching from PVC piping; Discharge from plastics factories.                                   |
| 76. Xylenes (ppm)  | 10   | 10  | Discharge from petroleum factories; Discharge from chemical factories.                         |

# Appendix C to Subpart O—Health Effects Language

### **Microbiological Contaminants**

(1) Total Coliform. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.

(2) Fecal coliform/E.Coli. Fecal coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with severely compromised immune systems.

(3) Turbidity. Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

#### **Radioactive Contaminants**

(4) Beta/photon emitters. Certain minerals are radioactive and may emit forms of radiation known as photons and beta radiation. Some people who drink water containing beta and photon emitters in excess of the MCL over many years may have an increased risk of getting cancer.

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

(6) Combined Radium 226/228. Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting

#### **Inorganic Contaminants**

- (7) Antimony. Some people who drink water containing antimony well in excess of the MCL over many years could experience increases in blood cholesterol and decreases in blood sugar.
- (8) Arsenic. Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.

(9) Asbestos. Some people who drink water containing asbestos in excess of the MCL over many years may have an increased risk of developing benign intestinal polyps

(10) Barium. Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.

(11) Beryllium. Some people who drink water containing beryllium well in excess of the MCL over many years could develop intestinal lesions.

(12) Cadmium. Some people who drink water containing cadmium in excess of the MCL over many years could experience kidney damage.

(13) Chromium. Some people who use water containing chromium well in excess of the MCL over many years could experience allergic dermatitis.

(14) Copper. Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

(15) Cyanide. Some people who drink water containing cyanide well in excess of the MCL over many years could experience nerve damage or problems with their thyroid.

(16) Fluoride. Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Children may get mottled teeth.

(17) 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 or high blood pressure.

(18) Mercury (inorganic). Some people who drink water containing inorganic mercury well in excess of the MCL over many years could experience kidney damage.

(19) Nitrate. Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.

(20) Nitrite. Infants below the age of six months who drink water containing nitrite in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby

(21) Selenium. Selenium is an essential nutrient. However, some people who drink water containing selenium in excess of the MCL over many years could experience hair or fingernail losses, numbness in fingers or toes, or problems with their circulation.

(22) Thallium. Some people who drink water containing thallium in excess of the MCL over many years could experience hair loss, changes in their blood, or problems with their kidneys, intestines, or liver.

#### **Synthetic Organic Contaminants Including Pesticides and Herbicides**

(23) 2,4-D. Some people who drink water containing the weed killer 2,4-D well in excess of the MCL over many years could experience problems with their kidneys, liver, or adrenal glands.

(24) 2,4,5-TP (Silvex). Some people who drink water containing silvex in excess of the MCL over many years could experience liver problems.

(25) Acrylamide. Some people who drink water containing high levels of acrylamide over a long period of time could have problems with their nervous system or blood, and may have an increased risk of getting cancer.

(26) Alachlor. Some people who drink water containing alachlor in excess of the MCL over many years could have problems with their eyes, liver, kidneys, or spleen, or experience anemia, and may have an increased risk of getting cancer.

(27) Atrazine. Some people who drink water containing atrazine well in excess of the MCL over many years could experience problems with their cardiovascular system or reproductive difficulties.

(28) Benzo(a)pyrene (PAH). Some people who drink water containing benzo(a)pyrene in excess of the MCL over many years may experience reproductive difficulties and may have an increased risk of getting cancer

(29) Carbofuran. Some people who drink water containing carbofuran in excess of the MCL over many years could experience problems with their blood, or nervous or reproductive systems.

(30) Chlordane. Some people who drink water containing chlordane in excess of the MCL over many years could experience problems with their liver or nervous system, and may have an increased risk of getting cancer.

(31) Dalapon. Some people who drink water containing dalapon well in excess of the MCL over many years could experience minor kidney changes.

(32) Di (2-ethylhexyl) adipate. Some people who drink water containing di (2-ethylhexyl) adipate well in excess of the MCL over many years could experience general toxic effects or reproductive difficulties.

(33) Di (2-ethylhexyl) phthalate. Some people who drink water containing di (2ethylhexyl) phthalate in excess of the MCL over many years may have problems with their liver, or experience reproductive difficulties, and may have an increased risk of getting cancer.

(34) Dibromochloropropane (DBCP). Some people who drink water containing DBCP in excess of the MCL over many years could experience reproductive difficulties and may have an increased risk of getting cancer.

(35) Dinoseb. Some people who drink water containing dinoseb well in excess of the MCL over many years could experience reproductive difficulties.

(36) Dioxin (2,3,7,8-TCDD). Some people who drink water containing dioxin in excess of the MCL over many years could experience reproductive difficulties and may have an increased risk of getting cancer.

(37) Diquat. Some people who drink water containing diquat in excess of the MCL over many years could get cataracts.

(38) Endothall. Some people who drink water containing endothall in excess of the MCL over many years could experience problems with their stomach or intestines.

(39) Endrin. Some people who drink water containing endrin in excess of the MCL over many years could experience liver problems.

(40) Epichlorohydrin. Some people who drink water containing high levels of epichlorohydrin over a long period of time could experience stomach problems, and may have an increased risk of getting cancer.

(41) Ethylene dibromide. Some people who drink water containing ethylene dibromide in excess of the MCL over many years could experience problems with their liver, stomach, reproductive system, or kidneys, and may have an increased risk of getting cancer.

(42) Glyphosate. Some people who drink water containing glyphosate in excess of the MCL over many years could experience problems with their kidneys or reproductive difficulties.

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

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

(45) Hexachlorobenzene. Some people who drink water containing hexachlorobenzene in excess of the MCL over many years could experience problems with their liver or kidneys, or adverse reproductive effects, and may have an increased risk of getting cancer.

(46) Hexachlorocyclopentadiene. Some people who drink water containing hexachlorocyclopentadiene well in excess of the MCL over many years could experience problems with their kidneys or stomach.

(47) Lindane. Some people who drink water containing lindane in excess of the MCL over many years could experience problems with their kidneys or liver.

(48) Methoxychlor. Some people who drink water containing methoxychlor in excess of the MCL over many years could experience reproductive difficulties.

(49) Oxamyl [Vydate]. Some people who drink water containing oxamyl in excess of the MCL over many years could experience slight nervous system effects.

(50) PCBs [Polychlorinated biphenyls]. Some people who drink water containing PCBs in excess of the MCL over many years could experience changes in their skin, problems with their thymus gland, immune deficiencies, or reproductive or nervous system difficulties, and may have an increased risk of getting cancer.

(51) Pentachlorophenol. Some people who drink water containing pentachlorophenol in excess of the MCL over many years could experience problems with their liver or kidneys, and may have an increased risk of getting cancer.

(52) Picloram. Some people who drink water containing picloram in excess of the MCL over many years could experience problems with their liver.

(53) Simazine. Some people who drink water containing simazine in excess of the MCL over many years could experience problems with their blood.

(54) Toxaphene. Some people who drink water containing toxaphene in excess of the MCL over many years could have problems with their kidneys, liver, or thyroid, and may have an increased risk of getting cancer.

### Volatile Organic Contaminants

(55) Benzene. Some people who drink water containing benzene in excess of the MCL over many years could experience anemia or a decrease in blood platelets, and may have an increased risk of getting cancer.

(56) Carbon Tetrachloride. Some people who drink water containing carbon tetrachloride in excess of the MCL over many years could experience problems with their liver and may have an increased risk of getting cancer.

(57) Chlorobenzene. Some people who drink water containing chlorobenzene in excess of the MCL over many years could experience problems with their liver or kidnevs.

(58) o-Dichlorobenzene. Some people who drink water containing o-dichlorobenzene well in excess of the MCL over many years could experience problems with their liver, kidneys, or circulatory systems.

(59) p-Dichlorobenzene. Some people who drink water containing p-dichlorobenzene in excess of the MCL over many years could experience anemia, damage to their liver, kidneys, or spleen, or changes in their blood.

(60) 1,2-Dichloroethane. Some people who drink water containing 1,2-dichloroethane in excess of the MCL over many years may have an increased risk of getting cancer.

(61) 1,1-Dichloroethylene. Some people who drink water containing 1,1dichloroethylene in excess of the MCL over many years could experience problems with their liver.

(62) cis-1,2-Dichloroethylene. Some people who drink water containing cis-1,2dichloroethylene in excess of the MCL over many years could experience problems with their liver.

(63) trans-1,2-Dicholoroethylene. Some people who drink water containing trans-1,2dichloroethylene well in excess of the MCL over many years could experience problems with their liver.

(64) Dichloromethane. Some 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.

(65) 1,2-Dichloropropane. Some people who drink water containing 1,2dichloropropane in excess of the MCL over many years may have an increased risk of getting cancer.

(66) Ethylbenzene. Some people who drink water containing ethylbenzene well in excess of the MCL over many years could experience problems with their liver or kidneys.

(67) Styrene. Some people who drink water containing styrene well in excess of the MCL over many years could have problems with their liver, kidneys, or circulatory system.

(68) Tetrachloroethylene. Some people who drink water containing tetrachloroethylene in excess of the MCL over many years could have problems with their liver, and may have an increased risk of getting cancer.

(69) 1,2,4-Trichlorobenzene. Some people who drink water containing 1,2,4trichlorobenzene well in excess of the MCL over many years could experience changes in their adrenal glands.

(70) 1,1,1,-Trichloroethane. Some people who drink water containing 1,1,1trichloroethane in excess of the MCL over many years could experience problems with their liver, nervous system, or circulatory system.

(71) 1,1,2-Trichloroethane. Some people who drink water containing 1,1,2trichloroethane well in excess of the MCL over many years could have problems with their liver, kidneys, or immune systems.

(72) Trichloroethylene. Some people who drink water containing trichloroethylene in excess of the MCL over many years could experience problems with their liver and may have an increased risk of getting cancer.

(73) TTHMs [Total Trihalomethanes]. Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

(74) Toluene. Some people who drink water containing toluene well in excess of the MCL over many years could have problems with their nervous system, kidneys,

(75) Vinyl Chloride. Some people who drink water containing vinyl chloride in excess of the MCL over many years may have an increased risk of getting cancer.

(76) Xylenes. Some people who drink water containing xylenes in excess of the MCL over many years could experience damage to their nervous system.

### PART 142—[AMENDED]

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 is amended by adding a new paragraph (b)(6)(vii) 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 is 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 August 21, 2000. 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.

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

(4) Each State that has primary enforcement responsibility must report violations of this subpart in accordance with the requirements of § 142.15(a)(1).

4. Section 142.72 is 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 § 141.155(a) if it meets the following criteria:

5. Section 142.78 is 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 § 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 § 144.155(a).

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