

State Implementation Guidance for the Consumer Confidence Report (CCR) Rule

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

AUG 3 0 1999

OFFICE OF WATER

MEMORANDUM

Subject:

Consumer Gonfidence Report (CCR) State Implementation Guidance

From:

Cynthia Dougherty, Director

Office of Ground Water and Drinking Water

To:

Water Division Directors

Regions I - X

I am writing to forward the State Implementation Guidance for the Consumer Confidence Report (CCR) Rule. This final version updates the Interim State Implementation Guidance for the CCR Rule you received in June.

The CCR Rule promulgated last August requires all community water systems to issue annual drinking water quality reports to their customers, with the first report due October 19, 1999. The attached guidance provides a "how to approach" for implementing the regulation for EPA Regions and States. It contains a plain English summary of the rule and guidance for preparing State primacy revision applications. The implementation guidance covers areas of State flexibility, violation determination, and data reporting to SDWIS. Examples of ways in which community water systems can prepare and present information in the CCR are also provided.

New in this version of the implementation guidance is the CCR compliance strategy. This strategy outlines actions States and Regions should take to address CCR rule noncompliance. The final guidance also discusses MCL reporting format and provides guidance on *Federal Register* notices for primacy revision.

Thank you for your participation in the CCR implementation guidance development process and for your continued efforts to ensure that CCRs are the public education tools envisioned by the 1996 SDWA Amendments. If you have any questions or comments, please call me at (202)-260-5543 or have your staff call Kathy Williams at (202)-260-2589.

Attachment

cc:

CCR Implementation Workgroup

Betsy Devlin, OECA Vanessa Leiby, ASDWA

Stakeholders

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Introduction

The Consumer Confidence Report (CCR) rule is an important part of the 1996 Amendments to the Safe Drinking Water Act (SDWA). Reports issued under the CCR rule will give consumers information on their drinking water and opportunities to get involved in protecting their source(s) of drinking water. Under 40 CFR Part 141 Subpart O, all community water systems (CWSs) will be required to provide their customers with an annual water quality report or CCR. The purpose of this document is to provide EPA Regions and States with guidance on implementation of the CCR rule in the areas of State implementation, direct implementation by Regions, and how States can apply for primacy revision.

Every CWS, defined as a system that serves at least 25 residents year round or that has at least fifteen service connections used by year-round residents, must prepare and distribute a CCR [40 CFR 141.151(b)]. CWSs must deliver the first CCR to their customers by October 19, 1999. The second CCR is due by July 1, 2000 and subsequent reports by July 1, annually thereafter. A CWS that sells water to another CWS must provide the buyer with information such as monitoring results or other required water quality information that will enable the buyer to produce a CCR [40 CFR 141.152(d)].

The CCR rule provides a framework that water suppliers will use to give consumers information on their drinking water, including the water source, contaminants detected in finished water, health effects of contaminants when violations occur, likely sources of detected contaminants, and availability of source water assessments. By understanding their water supplies, customers, especially those with special health needs, can make informed decisions regarding their use of drinking water. States and water suppliers should view these reports as a public information tool to not only educate and involve the public but also to promote a dialogue between customers and their drinking water utilities. It is an opportunity that water systems can use to their advantage to explain how their community's drinking water supplies are protected.

This guidance document contains information that will aid States in implementing the rule and in applying for interim primacy. It also provides examples of ways in which CWSs can prepare and present data in the CCR. You will find information on the following topics:

- CCR rule requirements.
- Reporting and recordkeeping.
- Violation determination and Safe Drinking Water Information System (SDWIS) reporting.
- Content of State Primacy Revision Applications.
- State/EPA Implementation Agreements that cover the period prior to State submission of a complete and final primacy revision application, which results in interim primacy.

Section I is a summary of the rule requirements including key dates important to the rule. Section II addresses violation determination and associated reporting requirements. Section III covers procedures and content for primacy revision applications, including deadlines for submission.

The Appendices of this document contain information and example formats that State and EPA Regional Offices may find useful in the primacy revision process. The Appendices are:

- Appendix A contains an example format for a State Primacy Revision Application Package.
- Appendix B provides examples of a State/EPA Implementation Agreement.
- Appendix C contains example formats for the CCR Certification.
- Appendix D contains example formats for the Governor's Mailing Waiver.
- Appendix E provides guidance on Safe Drinking Water Information System (SDWIS) Reporting.
- Appendix F contains a CCR example as well as additional information on report content.
- Appendix G contains a list of EPA's minimum detection limits.
- Appendix H contains Appendices from 40 CFR 141, Subpart O.
 - Table H-1: Appendix A Converting MCL Compliance Values for CCRs.
 - Table H-2: Appendices B and C Regulated Contaminant Information.
 - Table H-3: List of Unregulated and ICR Contaminants.
- Appendix I contains additional information on the Source Water Assessment Program (SWAP) and susceptibility definitions.
- Appendix J provides information on the CCR compliance strategy.
- Appendix K contains a memorandum on alternative MCL reporting format.
- Appendix L contains information on additional resources to prepare CCRs.

Section I. Rule Requirements

A. Key Dates of the Rule

The CCR final rule, published in the *Federal Register* on August 19, 1998, became effective September 18, 1998 - 30 days after publication [40 CFR 141.152(a)]. CWSs must deliver the first CCR to their customers within 13 months of the regulation's effective date, or by October 19, 1999. Delivery of the second report is due by July 1, 2000 and subsequent reports by July 1 each year thereafter [40 CFR 141.152(b)]. No later than the date the CCR is required to be delivered to customers, the CWS must also mail a copy of the CCR to the primacy agency, as well as any other agency or clearinghouse the primacy agency designates [40 CFR 141.155(c) and (d)]. The report due by October 19, 1999 must contain data used to determine compliance in calendar year 1998. The second report must contain data used to determine compliance in calendar year 1999. Each report thereafter must contain data used to determine compliance for the previous calendar year.

Within 3 months from the date the system is required to deliver its CCR to customers, the CWS must send a letter of certification to the primacy agency certifying that the system has: (1) distributed the CCR to its customers; and (2) used in the report information that is correct and consistent with compliance monitoring data previously submitted to the primacy agency [40 CFR 141.155(c)]. Certifications must be sent to the primacy agency by January 19, 2000 for the first CCR and by October 1 annually for the second and subsequent reports. A CWS can deliver the certification to the primacy agency at the same time it delivers the CCR to its customers.

New CWSs must prepare and deliver CCRs on the same schedule as existing systems and therefore have until July 1 after their first full calendar year of operation to deliver the first CCR to their customers [40 CFR 141.152(c)]. The certification for the first report must be sent to the State by October 1 after the first full calendar year of operation. For each year thereafter, reports must be delivered by July 1, and certifications must be sent to the State by October 1.

Drinking water wholesalers are CWSs that sell water to other CWSs. Under this rule wholesalers must deliver relevant monitoring and compliance data to the retailers before reports are due to customers so that the retailer has lead-time to prepare a CCR. For the first CCR, drinking water wholesalers must provide data no later than 6 months before retailers are required to deliver their CCR or by April 19, 1999. For the second and subsequent reports, data must be delivered by April 1 annually thereafter. Data must be delivered to the buyer system by those dates, unless the wholesaler and retailer mutually agree upon a different date and specify it in a contract between the two parties [40 CFR 141.152(d)].

A time line of important dates under the rule for existing CWSs, new CWSs, and drinking water wholesalers is presented in Table 1.

	Table 1 - K	ey Dates of Rule
	Rule Requirement	Requirement Date
1.	Date of Publication	August 19, 1998
2.	CCR Delivery Requirements	·
For	Existing CWSs	
	Delivery of first CCR	By October 19, 1999
	Delivery of first certification	By January 19, 2000
	Delivery of second CCR	By July 1, 2000
	Delivery of second certification	By October 1, 2000
	Delivery of subsequent CCRs	By July 1 annually
	Delivery of subsequent certifications	By October 1 annually
For	New CWSs	
	Delivery of first CCR	By July 1 after first full calendar operating year
	Delivery of first certification	By October 1 after first full calendar operating year
	Delivery of subsequent CCRs	By July 1 annually
	Delivery of subsequent certifications	By October 1 annually
<u>For</u>	CWSs That Sell Water To Another CWS	
	Delivery of information for first CCR	By April 19, 1999
	Delivery of information for subsequent CCRs	By April 1, annually
		The seller must provide the information to the buyer by the dates shown above, unless the buyer and seller enter into a contractual agreement specifying another date.

B. Summary of Rule Requirements - [40 CFR 141.153 and 141.154]

The requirements of the CCR rule can be divided into two categories: (1) report content requirements and (2) report delivery and recordkeeping requirements. In this section of the guidance, detailed information on each category is presented.

B.1. CCR Content Requirements

The eight items of information that must be included in the CCR are displayed in Table 2. Each item is discussed in more detail on the following pages.

	Table 2 - Required Information for the CCR		
Items	Content Requirements	Federal Citation	
Item 1	Required Information about the Water System	§141.153(h)(2) §141.153(h)(3) §141.153(h)(4)	
Item 2	Source(s) of Water	§141.153(b)	
Item 3	Definitions	§141.153(c)	
Item 4	Reporting the Levels of Detected Contaminants	§141.153(d)	
Item 5	Information on <i>Cryptosporidium</i> , Radon, and Other Contaminants	§141.153(e)	
Item 6	Required Additional Health Information	§141.153(h)(1) §141.154	
Item 7	Information on Violations of National Primary Drinking Water Regulations (NPDWR)	§141.153(f)	
Item 8	Information If a System Is Operating Under a Variance or Exemption	§141.153(g)	

Item 1: Required Information about the Water System [40 CFR 141.153(h)(2) to (h)(4)]

The system must identify itself, and include the following additional information:

• The telephone number of a contact person at the water system who can provide additional information and answer questions about the report [40 CFR 141.153(h)(2)].

- For communities with a large proportion of non-English speaking residents, provide information in the appropriate language(s) regarding the importance of the report or 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 [40 CFR 141.153(h)(3)]. The primacy agency will determine when a population of non-English speaking residents is sufficiently large to require systems to take special measures for these residents. Appendix F of this guidance contains additional information on incorporating information for non-English speaking residents into the CCR.
- A listing of known opportunities for public participation in decision-making processes that may affect drinking water quality (e.g., time and place of regularly-scheduled board meetings) [40 CFR 141.153(h)(4)]. If there are no regularly-scheduled meetings, the CWS must tell customers how they can get information once meetings are scheduled. CWSs such as mobile home parks or retirement/nursing homes, that do not have such meetings, must provide interested customers with the telephone number of a contact person at the water system as discussed in the first bullet under Item 1.

Item 2: Sources of Water [40 CFR 141.153(b)]

A CWS must report the type of water (ground water, surface water, or a combination of the two) and the commonly-used name(s) (if sources are named) and locations of water source(s) [40 CFR 141.153(b)(1)]. EPA encourages systems to provide simple maps to help customers understand the source(s) of their water.

. Under Section 1453 of the 1996 SDWA Amendments, States are required to ensure that source water assessments are completed for all public water systems by the year 2003. These assessments will include delineation, inventory, and susceptibility information. If a source water assessment has been completed, the system must notify customers in the CCR that an assessment is available and tell them where to obtain a copy [40 CFR 141.153(b)(2)]. If the CWS has an assessment that was provided or approved by the primacy agency, the CCR must also 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. Susceptibility is a synthesis of several factors and is intended as a preliminary tool to facilitate local source water protection planning. Utilities could also use the reports to highlight additional local assessment and protection efforts which are planned or in place. In cases where a CWS has the available information, EPA encourages the system to highlight significant sources of contamination in the source water area.

More information about the Source Water Assessment Program (SWAP), including a list of State source water contacts can be found at http://www.epa.gov/safewater. Appendix I provides detailed information on State SWAP programs, wellhead protection programs, and other source water information resources. In addition, Appendix I contains information on susceptibility determinations and examples of how source water information can be included in the CCRs.

Item 3: Definitions [40 CFR 141.153(c)]

The CCR must include definitions of key regulatory terms that customers will need to understand the contaminant data. Each CCR must include the following definitions for Maximum Contaminant Level (MCL) and Maximum Contaminant Level Goal (MCLG):

- Maximum Contaminant Level (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.
- Maximum Contaminant Level Goal (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.

If the report contains information on a contaminant that is regulated as a Treatment Technique or Action Level, the following definitions must be included as applicable:

- Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.
- Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

If the CWS operates under a variance or exemption, the CCR must include the following definition for variances and exemptions:

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

Item 4: Reporting Levels of Detected Contaminants [40 CFR 141.153(d)]

One key element of the CCR is the table (or series of adjacent tables) that reports the levels of detected contaminants. This table(s) must display the highest contaminant level used to determine compliance and the ranges of contaminant levels when compliance is based on an average of samples. For ease of comparison, the highest level of a detected contaminant should be presented alongside the associated MCL, the MCLG, and a description of the likely or known source of that contaminant in drinking water.

The table(s) must contain data related to finished water monitoring for the following contaminants:

- Regulated contaminants (i.e., contaminants subject to an MCL, AL, or TT).
- Unregulated contaminants (i.e., contaminants for which monitoring is required under 40 CFR 141.40 Special monitoring for inorganic and organic contaminants).
- Disinfection byproducts or microbial contaminants for which monitoring is required under 40 CFR 141.142 and 141.143 (i.e., the Information Collection Rule [ICR]) except results of monitoring for *Cryptosporidium*.

Note: Results from ICR or any other monitoring of raw or finished water that indicate the presence of *Cryptosporidium*, must be included in the CCR. A summary of the results should be displayed outside of the detected contaminants table, elsewhere in the report. Item 5 on page 12 discusses presentation of this data in more detail.

Only the results of ICR finished water monitoring are required to be included in the table(s). Any additional monitoring results which a CWS chooses to include in the CCR must be displayed separately.

Systems must report data from monitoring completed during the previous calendar year. Systems that have monitoring waivers, or for another reason monitor less than once per year for regulated contaminants, must include in the table(s) information on contaminants detected in the most recent testing period. For example, if a system monitors once every three years for a contaminant and detected that contaminant in the last sample, it would need to report the same detected level in each of the three years until it takes a new sample. The report must also contain a brief statement explaining that the data presented is from the most recent testing done in accordance with regulations. The statement may read as follows:

As authorized and approved by EPA, the State has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of our data [e.g., for organic contaminants], though representative, is more than one year old.

No data older than 5 years need be included in the first or subsequent reports. For example, the first report must contain data used to determine compliance in calendar year 1998. Working backward, the 5 year period would extend from the end of 1998 to the beginning of 1994, so data obtained prior to 1994 should not be used in the report.

The results of disinfection byproduct monitoring done under 40 CFR 141.142 and finished water microbial monitoring done under 40 CFR 141.143 (the ICR) must be reported only for 5 years from the date of the last sample or until the detected contaminant is regulated and subject to regular monitoring requirements, whichever comes first.

A detected contaminant is any contaminant found at or above the minimum detection limits in:

- 40 CFR 141.23(a)(4) for inorganic contaminants.
- 40 CFR 141.24(f)(7) for organic contaminants listed in 40 CFR 141.61(a).
- 40 CFR 141.24(h)(18) for organic contaminants listed in 40 CFR 141.61(c).
- 40 CFR 141.25(c) for radionuclides.

Refer to Appendix G for a list of EPA's minimum detection limits for the contaminants specified above. The detection levels for some contaminants, such as lead, copper, and many of the disinfection byproducts are not included in the CFR sections above and are thus not included in Appendix G. If a system's laboratory analysis provides a detected value for a contaminant not listed in the detection limit table, the system should report the contaminant in the CCR.

For each detected contaminant identified above (i.e., inorganic and organic contaminants, and radionuclides), the table(s) must contain:

- The MCL for that contaminant expressed as a number equal to or greater than 1 (refer to Appendix A to Subpart O of the rule, which illustrates how to convert MCL compliance values for CCRs. Appendix H of this guidance contains a copy of Appendix A to Subpart O of the rule). If the contaminant is regulated as a treatment technique, put the words "TT" in place of the MCL. If the contaminant is regulated as an action level, specify the AL applicable to that contaminant.
- The MCLG for that contaminant expressed in the same units as the MCL (refer to Appendix A to Subpart O of the rule, a copy of which is included in Appendix H of this guidance).
- The highest level of that contaminant used to determine compliance with National Primary Drinking Water Regulations (NPDWR) and the range of detected levels, expressed in the same units as the MCL and MCLG. Refer to Appendix F of this guidance to see examples of how to interpret and present monitoring data for some contaminants in the scenarios described below.
 - If compliance with the MCL is determined annually or less frequently (for example, many inorganic and organic chemical contaminants), include the highest detected level at any sampling point <u>and</u> the range of detected levels.
 - If compliance with the MCL is determined by a running annual average of all the samples taken from a sampling point (for example, inorganic contaminants specified in 40 CFR141.23(i)), include the highest average of any of the sampling points <u>and</u> the range of detections at all sampling points.

If compliance with the MCL is determined by calculating a running annual average of all samples at all sampling points (for example, total trihalomethanes [TTHMs]), include the average of all samples <u>and</u> the range of detected levels.

Note: When rounding off 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 to Subpart O of the rule. A copy of that appendix is provided in Appendix H of this guidance.

For turbidity, the table(s) must contain:

- * The highest average monthly value, when reported pursuant to 40 CFR 141.13 turbidity as a MCL. Although an explanation for why turbidity is measured is not required in this situation, a CWS may wish to include such an explanation in the CCR.
- * The highest single measurement, when reported pursuant to 40 CFR 141.71 Criteria to avoid filtration. An explanation for why turbidity is measured should be included and could read as follows:
 - Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the quality of water.
- The highest single measurement and the lowest monthly percentage of samples meeting the turbidity limits specified in 40 CFR 141.73 for the relevant filtration technology, when reported pursuant to 40 CFR 141.73 turbidity as a TT/indicator of filtration performance. An explanation of the reasons for measuring turbidity should be included and could read as follows:

Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

Appendix F of this guidance contains an illustration of how to present turbidity data.

Note: The final Interim Enhanced Surface Water Treatment Rule (IESWTR) [63 FR 69516, 16 December 1998], revised the turbidity reporting requirements in 40 CFR 141.73. New section 40 CFR 141.173 states that for systems using conventional filtration or direct filtration, the current turbidity standard of 5 NTU as a maximum and 0.5 NTU in at least 95% of the measurements taken has been revised to 1 NTU as a maximum and 0.3 NTU in at least 95% of the samples taken. The revised requirement, which becomes effective December 17, 2001, applies to surface water systems or ground water systems under the direct influence of surface water (GWUDI) that serve 10,000 or more people and use filtration treatment. The final

IESWTR also amended Section 141.153 (d)(4)(v)(C) of the CCR rule to reflect the revised turbidity requirement.

Note: The regulation does not specify where the turbidity explanations should be placed in the report. However, due to space limitations within the table, a CWS may choose to place this explanation outside of the table, elsewhere in the report.

If lead and/or copper is detected, the table(s) must contain:

- * The 90th percentile value from the most recent sampling, and
- * The number of sampling sites exceeding the action level.

For total coliforms, the table(s) must contain:

- The highest number of positive samples collected in 1 month, for systems that collect fewer than 40 samples per month.
- * The highest percentage of positive samples collected in 1 month, for systems that collect 40 or more samples per month.

For fecal coliform and E. Coli, the table(s) must contain:

* The total number of positive samples for the year.

If the system detects unregulated contaminants for which monitoring is required (except *Cryptosporidium*), the table(s) must contain the average of any monitoring results from the year <u>and</u> the range of detections. The CCR may also include a brief explanation for why a system monitors for unregulated contaminants. The explanation may read as follows:

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

The likely source(s) of that contaminant, according to the best information known to the water system. 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 Subpart O of the rule which are most applicable to the local situation.

As stated in the preamble to the final rule (p. 44519), EPA's intent is for this information to be as specific as possible. For example, the report should identify a specific point source, such as "Al's Chicken Houses" or the "Super-Shiny Paper Mill" if possible but may use

generic terms from Appendix B to Subpart O such as "farms" or "paper mills" in the absence of specific information from sanitary surveys, source water assessments, or other means. If none of the generic sources from Appendix B to Subpart O of the rule are applicable to the system, a footnote may be added to the report indicating that to the best of the system's knowledge none of the typical sources of contamination listed in the table(s) for that contaminant exist in the source water area(s). A copy of Appendix B to Subpart O of the regulation is provided in Appendix H of this guidance.

For any contaminant that violates an MCL, a TT, or exceeds an AL, include a clear indication in the table(s) of the violation or exceedence. This indication could, for example, take the form of a different color type, a larger or heavier font, or a large star. Near by, but not in the table(s), include a clear and easy to understand statement explaining not only the violation, but also the length of the violation, potential health effects because of the violation, and the actions that have been taken by the CWS to remedy the problem. The potential health effects language must be from Appendix C to Subpart O of the rule, a copy of which is included in Appendix H of this guidance.

EPA recognizes that there may be cases where a State MCL may be more stringent than the Federal standard and recommends that systems use the CCR to inform their customers of such occurrences. This could be easily accomplished by highlighting the MCL through a different font or asterisk and explaining in a footnote to the table that the State standard is stricter. EPA also recommends that customers should be informed when there is no Federal standard and the State has developed its own standard. For example, EPA recommends secondary standards or non-enforceable guidelines regulating contaminants that may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor, and color) in drinking water. However, States may choose to adopt the secondary standards as enforceable standards. Refer to Appendix F which contains a sample CCR and additional instruction on presenting such information.

If the system distributes water to its customers from multiple hydraulically independent distribution systems fed from different raw water sources, include in the table(s) separate columns for detection data for each service area. Also include a description of the area served by each distribution system. Alternatively, systems could produce separate reports tailored to include data for each service area.

<u>Item 5:</u> <u>Information on Cryptosporidium, Radon, and Other Contaminants</u> [40 CFR 141.153(e)]

If a system monitored for *Cryptosporidium* and/or radon and did not detect either, the system is not required to discuss the monitoring or the results of the monitoring in the report. However if monitoring indicated the presence of either of these contaminants, information about the monitoring and results of the monitoring must be included in the CCR and displayed outside of the table(s) reporting the levels of detected contaminants.

Cryptosporidium

If the system has performed any monitoring for *Cryptosporidium*, including monitoring to satisfy ICR requirements, which indicates that *Cryptosporidium* may be present either in its source water or its finished water, the CCR must contain:

- A summary of the results of the monitoring. CWSs may choose whether or not to report the actual analytical results as a part of this summary.
- An explanation of the significance of the results. CWSs should tell customers if they need to be concerned by this information. A sample explanation is given below:

Cryptosporidium is a microbial parasite which is found in surface water throughout the U.S. Although filtration removes Cryptosporidium, the most commonly- used filtration methods cannot guarantee 100 percent removal. Our monitoring indicates the presence of these organisms in our source water and/or finished water. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals are able to overcome the disease within a few weeks. However, immuno-compromised people have more difficulty and are at greater risk of developing severe, life threatening illness. Immuno-compromised individuals are encouraged to consult their doctor regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested for it to cause disease, and may be passed through means other than drinking water.

Radon

If the system has performed any monitoring that indicates the presence of radon in its finished water, the CCR must contain:

- ► The results of the monitoring.
- An explanation of the significance of the results. A possible explanation is given below:

Radon is a radioactive gas that you cannot see, taste, or smell. It is found throughout the United States. Radon can move up through the ground and into a home through cracks and holes in the foundation. Radon can build up to high levels in all types of homes. Radon can also get into indoor air when released from tap water from showering, washing dishes, and other household activities. Compared to radon entering the home through soil, radon entering the home through tap water will in most cases be a small source of radon in indoor air. Radon is a known human carcinogen. Breathing air containing radon can lead to lung cancer. Drinking water containing radon may also cause increased risk of stomach cancer. If you are concerned about radon in your home, test the air in your home. Testing is

inexpensive and easy. Fix your home if the level of radon in your air is 4 picocuries per liter of air (pCi/l) or higher. There are simple ways to fix a radon problem that aren't too costly. For additional information, call your State radon program or call EPA's Radon Hotline (800-SOS-RADON).

Other Contaminants

If the system has voluntarily performed additional monitoring and this monitoring indicates the presence of other non-regulated contaminants in the finished water, EPA **strongly** encourages CWSs to report any results that may indicate a health concern. EPA considers detects above a proposed MCL or health advisory level to indicate possible health concerns. The EPA Safe Drinking Water Hotline (800-426-4791) and EPA website (http://www.epa.gov/safewater/hfacts.html) are resources for this information. For such contaminants, EPA recommends that the report include:

- ► The results of monitoring, and
- An explanation of the significance of the results noting the existence of a health advisory or a proposed regulation.

Again, if provided, this information must be displayed outside of the detected contaminants table(s).

<u>Item 6</u>: <u>Required Additional Health Information</u> [40 CFR 141.153(h)(1) and 141.154]

Every CCR must contain the following two statements, prominently displayed somewhere in the report. The first statement is a brief explanation regarding contaminants which may reasonably be expected to be found in drinking water, including bottled water [40 CFR 141.153(h)(1)]. The second statement informs customers that some people may be more vulnerable to contaminants in drinking water than the general population and encourages those who may be particularly at risk from infection to seek advice from their health care provider [40 CFR 141.154(a)]. Additional information about arsenic, nitrate, lead, and TTHMs may also be required, as described following explanations of the two required statements [40 CFR 141.154(b)-(e)].

Statement 1 - Explanation of Contaminants in Drinking Water and Bottled Water

This first statement is an explanation that must contain the language of paragraph §141.153(h)(1)(iv) shown below:

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 EPA's Safe Drinking Water Hotline (800-426-4791).

CWSs must also include information contained in §141.153(h)(1)(i) through (iii) on sources of drinking water, contaminants that may be present in source water, and why EPA and the Food and Drug Administration (FDA) establish regulations for contaminants respectively. CWSs have the choice of using the EPA language provided in §141.153(h)(1)(i) through (iii) or developing their own comparable language.

▶ §141.153(h)(1)(i) - Sources of Drinking Water:

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.

§141.153(h)(1)(ii) - Contaminants That May Be Present in Source Water:

Microbial Contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

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.

Pesticides and Herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

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.

Radioactive Contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

▶ §141.153(h)(1)(iii) - EPA and FDA Regulations:

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. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Statement 2 - Explanation of the Vulnerability of Some Populations to Contaminants in Drinking Water

This second statement informs customers that some people may be more vulnerable to contaminants in drinking water than the general population and encourages those who may be particularly at risk from infections to seek advice from their health care provider.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control and Prevention (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).

Educational Information about Arsenic, Nitrate, and Lead [40 CFR 141.154(b)-(d)]

A CCR must also contain additional educational material about arsenic, nitrate, and lead if those contaminants are detected under the following circumstances:

- Arsenic at levels above 25 μ g/l (50% of the MCL), but below the MCL
- Nitrate at levels above 5 mg/l (50% of the MCL), but below the MCL
- Lead above the action level of 15 μ g/l in more than 5%, and up to and including 10%, of sites sampled.

Note: Due to the difficulty of determining the action level between 5% and 10% of sites sampled when using small sample sizes, systems collecting fewer than 20 samples do not have to include the lead educational statement. Refer to Appendix F of this guidance for further explanation.

EPA requires that the appropriate educational statement be included in the report.

Arsenic: EF

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.

Nitrate:

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than 6 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.

Lead:

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).

EPA believes that water systems should have the flexibility to tailor their information to specific local situations. Systems that want to use language significantly different than that provided by EPA must develop comparable language *in consultation with* the primacy agency.

Note: Systems can add information on arsenic, nitrate, or lead in conjunction with these educational statements, as long it does not detract from the educational nature of the report as specified in 40 CFR 141.153(h)(5). For example, a system can explain that there could be other sources of arsenic from mining operations or pesticides that were used in the past. Additional information on health effects should be consistent with information provided in Appendix C to Subpart O of the rule. A copy of this appendix is provided in Appendix H of this guidance.

Health Effects Language for TTHMs [40 CFR 141.154(e)]

As stated in the preamble to the final CCR rule [p. 44514], the 1996 SDWA Amendments authorized the Administrator to require inclusion of language describing health concerns in CCRs for "not more than three regulated contaminants" other than those detected at levels above the MCL. EPA will use this authority in future rulemaking to require health effects language for contaminants when MCLs are promulgated or revised. The health effects language will be included in the reports of systems which are not in violation of the regulations because the MCL is not yet effective, but which detect the contaminant above the new or revised MCL.

The revised MCL for TTHMs is the first occasion where EPA exercised this authority. The final Stage 1 Disinfectants/Disinfection Byproducts Rule (DBPR) [63 FR 69475, 16 December 1998], amended the CCR rule to require systems that exceed the revised MCL of 80 ppb for TTHMs, but are below the current MCL of 100 ppb, to include health effects language in their CCRs. Section 141.154 of the CCR regulation has been amended by adding paragraph (e) to read as follows:

Community water systems that detect TTHMs above 0.080 mg/l (80 ppb), but below the MCL in Section 141.12, as an annual average, monitored and calculated under the provisions of Section 141.30, must include health effects language prescribed by paragraph (73) of Appendix C to Subpart O.

TTHMs Health Effects Language from Appendix C to Subpart O:

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 increased risk of getting cancer.

Compliance with the revised TTHM MCL is required for Subpart H systems serving 10,000 or more persons beginning December 16, 2001. (Subpart H systems are those systems using surface water or ground water under the direct influence of surface water). Ground water systems, as well as small surface water systems (Subpart H systems serving less than 10,000 persons), must comply with the revised TTHM MCL beginning December 16, 2003.

Systems serving more than 10,000 persons that detect TTHMs at levels between the current and revised MCLs must include TTHMs health effects language in their reports, beginning with the first CCR due in October 1999. Systems that serve less than 10,000 persons are not affected by this CCR requirement. If systems choose, they can include a footnote with the health effects language explaining that the system is in compliance with the current standards, but are above a future standard. The system may also wish to explain any actions the system is taking to reduce the level and meet the future standard. Refer to Appendix F of this guidance to see how data for TTHMs can be presented in the CCR.

Item 7: Information on Violations of National Primary Drinking Water Regulations (NPDWR) [40 CFR 141.153(f)]

If during the reporting period, the CWS was in violation of any of the following NPDWR requirements, its CCR must include a clear and readily understandable explanation of the violation, any potential adverse health effects, and steps the CWS has taken to correct the violation.

- Monitoring and reporting of compliance data.
- Recordkeeping of compliance data.
- Filtration and disinfection prescribed by Subpart H (§141.70 to §141.75).

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 CCR 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.

• Lead and copper control requirements prescribed by Subpart I (§141.80 to §141.84).

For systems that fail to meet the requirements listed below, the CCR must include applicable language for lead, copper, or both, from Appendix C to Subpart O of the rule. A copy of this appendix is provided in Appendix H of this guidance.

- 40 CFR 141.80(d); 141.81; and 141.82 Corrosion control treatment requirements.
 - □ 40 CFR 141.83 Source water treatment requirements.
 - □ 40 CFR 141.84 Lead service line replacement requirements.
- Treatment techniques for Acrylamide and Epichlorohydrin prescribed by Subpart K (§141.110 to §141.111).

For systems that violate Subpart K requirements, the CCR must contain the relevant language from Appendix C to Subpart O of the rule, a copy of this appendix is provided in Appendix H of this guidance.

- Special monitoring requirements as prescribed by 40 CFR 141.40 for inorganic and organic contaminants and 40 CFR 141.41 for sodium.
- Violation of the terms of a variance, an exemption, or a State or federal administrative or judicial order.

The Agency is not prescribing mandatory language to describe the health significance of monitoring and reporting violations; violations of recordkeeping or special monitoring requirements; or violations of a variance, or an exemption of a State or Federal administrative or judicial order; because the explanation has to be tailored to the circumstances of the violation. In cases where there is a violation that presents a significant health threat, the CWS may use relevant language from Appendix C to Subpart O of the rule, a copy of which is provided in Appendix H of this guidance. Appendix F of this guidance contains an example of a generic CCR and information on how to report violations.

Item 8: Information if a System is Operating Under a Variance or Exemption [40 CFR 141.153(g)]

If the CWS is operating under a variance or exemption, the CCR must include:

A section that explains that the system is operating under a variance or exemption, and the reasons it was issued.

- The date that it was issued and when it is up for renewal.
- A status report on what the system is doing to remedy the problem.
- A notice of any opportunity for public input in the review or renewal of the variance or exemption.

B.2. Report Delivery and Recordkeeping Requirements for CWSs

The CCR rule established eight report delivery and recordkeeping requirements for CWSs. Each requirement is shown in the table below and discussed in more detail on the following pages.

	Table 3 - Report Delivery and Recordkeeping Requirements for C	WSs
Items	Requirement	Federal Citation
Item 1	CCR Delivery to Customers	§141.155(a)
	 Each CWS must mail or otherwise directly deliver one copy of the CCR to each customer, unless granted a mailing waiver. (See Item 7 for mailing waivers) 	
Item 2	"Good Faith" Effort for Delivery to Non-Bill Paying Consumers	§141.155(b)
	 CWSs must make a "good faith" effort to reach those consumers who they serve but who do not get water bills, such as renters. "Good faith" efforts mean using a mix of several methods recommended by the primacy agency. 	
Item 3	Delivery of CCR and Certification to Primacy Agency	§141.155(c)
	CWSs must mail to the primacy agency: (1) a copy of the CCR no later than the date the system is required to deliver the report to customers; and (2) within 3 months of the required CCR delivery date, a certification that the CCR was distributed to customers with information that is correct and consistent with compliance monitoring data previously submitted to the primacy agency.	
Item 4	CCR Delivery to Other Agencies	§141.155(d)
	 CWSs must deliver the CCR to any other agency identified by the primacy agency no later than the required date to send the CCR to its customers. 	
Item 5	CCR Availability to the Public	§141.155(e)
•	 CWSs must make CCRs available to the public upon request. 	
Item 6	CCR Availability on the Internet	§141.155(f)
	 CWSs serving 100,000 or more persons must post the CCR on a publicly accessible Internet site. 	
Item 7	Mailing Waiver for CWSs Serving Fewer Than 10,000 Persons	§141.155(g)
	The Governor of a State or his/her designee, or the Tribal leader (if the Tribe has met §142.72 requirements) can waive the mailing requirement of §141.155(a). The Regional Administrator in consultation with the Tribal government can waive the mailing requirement in Indian country when no Tribe is deemed eligible.	
Item 8	CWS Keeping CCR Copies on File	§141.155(h)
	 CWSs must keep copies of their CCR on file for at least 5 years. 	

Items 1-2: CCR Delivery to Customers [40 CFR 141.155(a)] "Good Faith" Effort for Delivery to Non-Bill Paying Consumers [40 CFR 141.155(b)]

CWSs are required to mail or otherwise directly deliver a copy of the CCR to each customer. EPA mandates direct delivery of CCRs to bill addressees, but at the same time EPA expects CWSs to make serious and "good faith" efforts to reach non-bill paying consumers. A "good faith" effort means selecting the most appropriate methods to reach those consumers from a menu of options recommended by the primacy agency. These options include but are not limited to:

- ▶ Posting the CCR on the Internet.
- ▶ Mailing the CCR to postal patrons in metropolitan and rural areas.
- Advertising the availability of the CCR in news media.
- ▶ Publishing the CCR in a local newspaper.
- Posting the CCR in public places such as cafeterias or lunch rooms of public buildings.
- Delivering multiple copies of the CCR for distribution by single-biller customers such as apartment buildings or large private employers.
- Delivering the CCR to community organizations.
- ► Posting the CCR in libraries, schools, or post offices.

EPA does not intend to place an undue burden on the systems, but believes that it is in the systems' interest to spread the word about the quality of its water as widely as possible. CWSs should know that there are a variety of options that can be tailored to each specific local situation to reach non-bill paying consumers. EPA would interpret the inclusion of a note in the CCR, asking recipients to share the information with non-bill paying consumers, as part of a "good faith" effort. A sample note may read as follows:

Town Water System has included additional copies of our Consumer Confidence Report in this mailing. Town Water System would appreciate it if large volume water customers such as yourself post extra copies of these reports in conspicuous locations or distribute them to your tenants, residents, patients, students and/or employees. This action will allow individuals who consume the water Town Water System delivers, but are not billed customers, to learn about our water system.

Items 3-4: Delivery of CCR and Certification to Primacy Agency [40 CFR 141.155(c)] CCR Delivery to Other Agencies [40 CFR 141.155(d)]

The CWS must mail a copy of the CCR to the primacy agency, as well as any other agency or clearinghouse the primacy agency designates, no later than the date the system is required to deliver the report to its customers. The mailing may be in an electronic or hard copy format. Examples of other agencies may include State and local public health or environment departments, public utility commissions, and consumer advocates' offices. Within 3 months from the date the system is required to deliver the CCR to customers, the CWS must send a letter of certification to the primacy agency certifying that the system has:

- 1. Distributed the CCR to its customers, and
- 2. Used in the report information that is correct and consistent with compliance monitoring data previously submitted to the primacy agency.

The delivery date for the first CCR is October 19, 1999 and the due date for the certification is January 19, 2000. A CWS does have the option to deliver the certification to the primacy agency at the same time it delivers the CCR. As discussed in Item 7 on page 24, systems that have been granted mailing waivers are still required to deliver a copy of the report to the primacy agency and any other agency the primacy agency designates.

EPA recommends that States and CWSs view the certification letter as another opportunity to explain how the CWS is telling customers about the quality of the drinking water and the steps taken to protect sources of their water. Therefore, States are encouraged to have CWSs certify that they comply with all the regulatory requirements of Subpart O; include information on how they made a "good faith" effort to reach consumers that do not get water bills; include date(s) and method(s) of distribution, including names of newspapers, if applicable; list other means of making the report available to the public; and list the other agencies the CCR was sent to as directed by the primacy agency. For systems with mailing waivers, information on the newspaper and dates where the CCR was published for systems serving fewer than 10,000 persons may be included. For systems serving fewer than 500 persons information on how customers were notified about the availability of the CCR, including posting locations may be included.

Appendix C of this guidance includes example formats for the CCR certification. The first format is for a basic CCR certification where only the two elements described above are required. The remaining example formats are more enhanced certifications to be used when CWSs are asked, based on States rules, to provide additional information on how the CCR was distributed.

Items 5-6: CCR Availability to the Public [40 CFR 141.155(e)] CCR Availability on the Internet [40 CFR 141.155(f)]

CWSs must make their CCRs available to members of the public who request the report. This means that a system must send, fax, or otherwise deliver a copy of the report to a member of the public who requests it. As discussed in Item 8 on page 25, systems must keep copies of past reports on file for at least 5 years. Systems may choose to make their reports available in the newspaper, on a web site, or in public places such as libraries, but this does not relieve them of the responsibility to send the reports to interested customers or other members of the public who may not have access to these other resources. Each CWS serving 100,000 or more persons must post the CCR on a publicly-accessible site on the Internet.

Item 7: Mailing Waiver for CWSs Serving Fewer than 10,000 Persons [40 CFR 141.155(g)]

The Governor of a State or his/her designee may waive the report mailing/direct delivery requirement for systems serving fewer than 10,000 persons. If a Tribe has met the eligibility requirements contained in 40 CFR 142.72 for waiving mailing requirements, then Tribal leaders may grant mailing waivers for systems serving fewer than 10,000 persons. On Indian lands where no Tribe has been deemed eligible, the authority to grant mailing waivers is delegated to the EPA Regional Administrator, who in consultation with the Tribal government can grant a mailing waiver. When the proper authority has granted the mailing waiver, the systems must take steps each year to make their customers aware of the CCR. A system which has been granted a mailing waiver may choose at any time to mail its report to customers instead of publishing it in the newspaper.

Depending on the circumstance, the CCR rule gives a Governor of a State or their designee, Tribal leader, or Regional Administrator the authority to sign a mailing waiver for systems serving fewer than 10,000 persons. If allowed by State law, a Governor may delegate authority to sign the waiver to the State drinking water administrator. The waiver may be included as part of State regulations when they are promulgated. A State may issue the waiver before it has promulgated its own regulations (i.e., while EPA is directly implementing the rule.) States, in accordance with their laws, can also establish specific criteria for obtaining and renewing the waivers. For example, a State can choose whether the waiver should be system-specific or apply to all systems in a given category. Appendix D of this guidance contains example formats for a Governor's mailing waiver.

A system that has been granted a mailing waiver and serves fewer than 10,000 but more than 500 persons, must publish the report in at least one local newspaper. The system must also notify its customers that the reports will not be mailed and provide information on the availability of the report. This notice could take the form of a note in the water bill, an ad in the newspaper, or any other means approved by the primacy agency. Finally, the system must make the report available to the public upon request. This means that a system must send, fax, or otherwise deliver a copy of the report to a member of the public who requests it.

A system that has been granted a mailing waiver and serves 500 or fewer persons does not have to publish the report in a newspaper, nor inform customers the CCR will not be mailed, if they provide notice at least once per year that the report is available upon request. This means that if a member of the public requests it, the CWS must send or otherwise deliver a copy of the CCR. Methods of notification include but are not limited to: mail, door to door delivery, or posting the CCR in an appropriate public location such as city hall, libraries, or grocery store bulletin boards.

Systems that have been granted mailing waivers are still required to follow other CCR rule requirements such as delivery of the report to the primacy agency and any other agency the primacy agency designates and using "good faith" efforts to reach non-bill paying consumers. As discussed in Items 1-2 on page 22, a "good faith" effort means selecting the most appropriate methods from those recommended by the primacy agency to reach those consumers. For example, in addition to publishing the CCR in a local newspaper, "good faith" efforts for systems serving fewer than 10,000 persons may include announcing the availability of the CCR on the radio or delivering the CCR to community organizations.

Item 8: CWS Keeping CCR Copies on File [40 CFR 141.155(h)]

CWSs must keep copies of past reports on file for a minimum of 5 years.

B.3. Recordkeeping Requirements for States

Under 40 CFR 142.16(f)(3), each State that has primary enforcement responsibility must maintain a copy of the report for each water system in the State for a period of 1 year. The State must also keep the corresponding certifications CWSs are required to send to the primacy agency under 40 CFR 141.155(c) for a period of 5 years. The certifications indicate that a copy of the CCR was distributed or made available (as appropriate) to customers by the due date; and that the report contained information correct and consistent with compliance monitoring data previously submitted to the primacy agency. Where State rules allow, systems may be asked to provide additional information on how the CCR was distributed.

Section II. Violation Determination and Safe Drinking Water Information System (SDWIS) Reporting

A. Violation Determination

This section of the implementation guidance summarizes violations that can be incurred by water systems under the CCR rule. There are two types of violations that States must report to the federal data system. One violation is categorized as major and the other as minor.

Major Violation

• CCR Report Violation (failure to produce and/or deliver report).

Minor Violation

CCR Adequacy/Availability/Content Violation.

We do not expect significant numbers of the minor Adequacy/Availability/Content Violation to be reported to SDWIS for the first CCRs. However, after the first 2 reports, EPA expects States to track and report on all violations.

A brief summary of the definitions for each violation type and return to compliance under the CCR rule are given below. Appendix E provides more detailed information on violation and compliance achieved definitions, and reporting requirements for each violation type. Examples on what to report, including how to report utilizing the appropriate Safe Drinking Water Information System/Federal version (SDWIS/FED) Data Transfer File Format can also be found in Appendix E, SDWIS Reporting.

CCR Report Violation: (Major)

A CCR Report Violation occurs when the CWS fails to produce and deliver a copy of the CCR to the public and to the primacy agency by the due date specified in the rule. The CWS must send a copy of the first report to the primacy agency by October 19, 1999. The primacy agency must receive subsequent reports by July 1, each year thereafter.

In circumstances where States find that a system issued a report that is significantly deficient in content, contains falsified information, or that a system fails to adequately deliver the report, States should view these inadequacies as significant and report a major CCR Report Violation.

Return to Compliance: The CWS has subsequently prepared a CCR that addresses all deficiencies identified by the State, delivered it to the primacy agency, and distributed the report in accordance with the regulation.

CCR Adequacy/Availability/Content Violation: (Minor)

A CCR Adequacy/Availability/Content Violation occurs when the CWS fails to include the required language, content, and/or meet the requirements to make reports available to the public as specified in the rule.

Failure to provide certification to the State within 3 months of the CCR due date that the report contained correct information and was distributed in accordance with the rule is a minor Adequacy/Availability/Content Violation.

This type of violation means that the CCR has met some but not all of the requirements for either report content or distribution.

Return to Compliance: It is possible that a system might be required to revise and redeliver its report if the primacy agency determines the deficiencies warrant it. For the first two years, where the emphasis will be on producing a report, if the primacy agency determines that the deficiencies have been corrected in the revised report, the primacy agency can report that the system has returned to compliance.

Appendix J of this guidance contains the CCR compliance strategy. This strategy outlines actions EPA Regions should take to address CCR rule noncompliance for the first year.

B. SDWIS Reporting Summary

Appendix E of this guidance contains detailed information on SDWIS reporting requirements for each violation type.

C. Optional CCR Compliance Checklist

Table 4, "CCR Compliance Checklist," is an <u>optional</u> tool that may help CWSs and regulators determine whether they have satisfied the content and delivery requirements of the rule. If a CWS can answer "Yes" to each of these items, then it is most likely that the system's CCR meets content requirements and the requirements for CCR distribution.

Table 4 - Optional CCR Compliance Checklist			
Tank		Completed	
Task	Yes	No	
Report Delivery and Recordkeeping			
Did Primacy Agency Receive:			
A copy of the CCR by the delivery date of October 19, 1999 for the first CCR and subsequent reports by July 1 annually thereafter?			
 Certification by January 19, 2000 for the first CCR and subsequent certifications by October 1 annually thereafter? 			
Did the Certification Indicate and the CWS Ensure That:			
The CCR was distributed to customers (i.e., CWS mailed or otherwise directly delivered reports)?			
The CCR contained information correct and consistent with compliance monitoring data previously submitted to primacy agency?			
Did the CWS Make the CCR Available by:			
 Using a "good faith" efforts to reach non-bill paying consumers? Delivering the CCR to other agencies as prescribed by the primacy agency? Making the CCR available to the public upon request? Post the CCR on the Internet if serving 100,000 or more persons? 			
For CWSs with Mailing Waivers That Serve Fewer than 10,000 Persons, Did They:			
 Publish CCR in at least one local newspaper? Notify customers that CCR will not be mailed? Make CCR available to the public upon request? 			
For CWSs with Mailing Waivers That Serve Fewer than 500 Persons, Did They:			
Provide notice to customers at least once during the year that the CCR is available to the public upon request?			

addition to the other rule requirements for report delivery, recordkeeping and content.

	Table 4 - Optional CCR Compliance Checklist				
	Tale	Completed			
	Task	Yes	No		
Con	tent of CCR				
Did t	he CCR Contain:				
(1)	Required Water System Information?				
	 Telephone number of a contact person. Information for non-English speaking populations, if appropriate. Information on public participation opportunities. 				
(2)	Information on Source(s) of Water?				
	 Type, common name, and location of water source(s). Source water assessment information, if available notice of availability of completed assessment information on how customers can obtain assessment a brief summary of the system's susceptibility to potential sources of contamination 				
(3)	Definitions For:				
	 MCL and MCLG? (required) TT, AL, Variances and Exemptions? (only if applicable) 				
(4)	Reported Levels of Detected Contaminants?				
	 Highest contaminant level used to determine compliance MCL and MCLG Range of levels found Description of likely source(s) 				
(5)	Information on Cryptosporidium, Radon, and Other Contaminants?				
(6)	Required Health Effects Language?				
	 Explanation of the vulnerability of some populations to contaminants in drinking water: 				
	Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control and Prevention (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).				

	Table 4 - Optional CCR Compliance Checklist					
	Task	Yes	No			
(6)	Required Health Effects Language? - continued					
	 Explanation of contaminants which may be reasonably expected to be found in drinking water, including bottled water: 					
	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 EPA's Safe Drinking Water Hotline (800-426-4791).					
	 Information on: sources of drinking water, contaminants that may be present in source water, and EPA/FDA regulations. 					
	§141.153(h)(1)(i) - Sources of Drinking Water: 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.					
	§141.153(h)(1)(ii) - Contaminants That May Be Present in Source Water:					
	Microbial Contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.					
	Pesticides and Herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.					
	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.					
	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.					
	Radioactive Contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.					
	§141.153(h)(1)(iii) - EPA and FDA Regulations: 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. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.					

	Table 4 - Optional CCR Compliance Checklist					
				oleted		
	Task			No		
	•	Informational statements on arsenic, nitrate, and lead, if those contaminants are detected under conditions prescribed in the rule:				
		Arsenic at levels above 25 $\mu \mathrm{g/I}$ (50% of the MCL), but below the MCL.				
		Nitrate at levels above 5 mg/l (50% of the MCL), but below the MCL				
		Lead above the action level of 15 μ g/l in more than 5%, and up to and including 10%, of sites sampled (If 20 or more samples are collected).				
	•	TTHMs health effects language, if levels are found between 80 and 100 ppb for CWS serving 10,000 or more persons.				
(7)	Infor	mation on Violations of NPDWR such as:				
	•	Monitoring and reporting of compliance data.				
	•	Recordkeeping of compliance data.				
	• .	Filtration and disinfection prescribed by Subpart H.				
	•	Lead and copper control requirements.				
	•	Treatment techniques for acrylamide and epichlorohydrin prescribed by Subpart K.				
	•	Special monitoring requirements for inorganic and organic contaminants and sodium.				
•	•	Violation of the terms of a variance, an exemption, or a State or Federal administrative or judicial order.				
	•	For these violations the report must:				
		 Contain an explanation of violations, potential health effects, and steps the CWS has taken to correct the violations. 				
		 Include language from Appendix C to Subpart O of the rule for violations of the lead and copper control requirements and violations of the acrylamide and epichlorohydrin requirements. 				
(8)	Req	uired Information If CWS Is Operating under a Variance or Exemption?				

Section III. Primacy Revision Application

A. Primacy Revision Application Package

A.1. Primacy Revision Time Frame

The CCR final rule, published on August 19, 1998, became effective September 18, 1998 - 30 days after publication in the *Federal Register*. CWSs have 13 months from that date or until October 19, 1999 to prepare and deliver the first CCR to their customers. The 1996 SDWA Amendments give States 2 years (until August 21, 2000) to adopt new or revised regulations and to submit complete and final requests for approval of program revisions, with the possibility of a 2-year extension. EPA recognizes that most States will not have their own rules in place until after the first or second CCR is required to be published. The Agency will implement and enforce the rule in partnership with the States in the interim.

EPA encourages States to adopt regulations and submit complete and final primacy revision applications as soon as possible. EPA strongly encourages States to submit applications by May 2000 to allow time for any changes needed to make applications "complete and final" before July 2000. This will ensure that States have interim primacy before the second set of CCRs are due to the public. Timely adoption will minimize confusion at water systems and make any necessary enforcement State enforcement. The CCR is the first of a series of regulations that will be promulgated under the 1996 amendments to the SDWA. States that postpone adoption and primacy revision may find the process of rule adoption overwhelming if they do not start now.

40 CFR 142 contains procedures for States to use as they obtain and/or update primary enforcement responsibility (primacy) for the Public Water System Supervision (PWSS) program. The 1996 SDWA Amendments modify the procedures for obtaining and updating primacy. On April 28, 1998, EPA promulgated the Primacy Rule to reflect these statutory changes (63 FR 23361). The Primacy Rule codified the new process for granting primary enforcement authority to States while their applications to modify primacy programs are under review (interim primacy). New section 142.12(e) explains that any State already having primacy for all existing NPDWRs is considered to have interim primacy for a new or revised regulation during the period in which EPA is making a determination with regard to the new or revised regulation. This interim enforcement authority begins on the date the primacy revision application is submitted in complete and final form or the effective date of the new or revised State regulation, whichever is later, and ends when EPA makes a final determination.

States must submit a primacy revision application following procedures outlined in 40 CFR 142.12 (b) to (d) - Revision of State Programs. Until primacy revision applications are submitted in complete and final form, EPA Regions have responsibility for directly implementing the CCR rule. However, the State and EPA can agree to implement the rule together during this period, through a State-EPA implementation agreement. Section A.4. on page 36 contains discussion of the options for documenting implementation agreements. EPA expects that most States will carry out implementation tasks and EPA will step in if enforcement becomes necessary.

A.2. State Program Revision - Review Process

EPA recommends a two-step process including submission of an optional draft and a complete and final request for program approval. The State and Region should agree to a plan and timetable for submitting the State primacy revision application as soon as possible after rule promulgation. Figure 1 on the next page diagrams these processes and their timing.

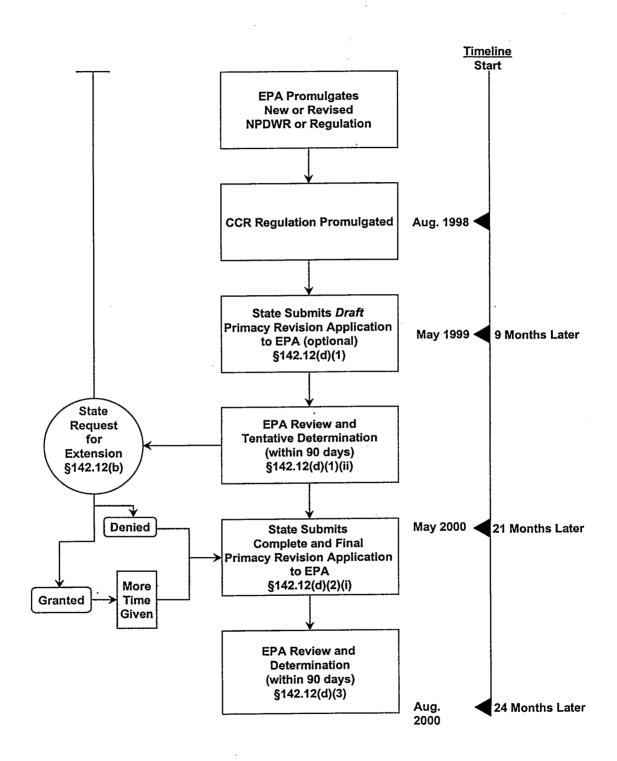
Draft Request - At their option, the State may submit a draft request for EPA review and tentative determination. The request should contain drafts of all required primacy application materials. We recommend that a draft request be submitted within 9 months after rule promulgation or by May 1999. We will make a tentative determination within 90 days on whether the draft request is approvable and list any changes that must be made before approval.

Complete and Final Request - This submission must be in accordance with 40 CFR 142.12(c)(1) and (2) and include an Attorney General's statement. Submission of a final request that is not preceded by a draft request may result in EPA requiring changes to final State regulations or policies. The Primacy Rule specified that rule adoption and submission of a primacy revision application should occur within 2 years after promulgation of the CCR regulation - August 21, 2000. However, EPA suggests that States submit a primacy revision application by May 2000 to allow time for any changes needed to make the application "complete and final" by the time the second set of reports are due in July.

Final Review Process - Once a State application is complete and final, EPA has a regulatory (and statutory) deadline of 90 days to review and either approve or disapprove the revised program. The Office of Ground Water and Drinking Water (OGWDW) and Office of Enforcement and Compliance Assurance (OECA) will conduct detailed reviews of the first State package submitted to each Region. We ask that the Region submit their comments with the State package for Headquarters review. Where the Regional review has identified all significant issues, Headquarters will waive review on the remainder of CCR Rule applications in that Region. OGWDW and OECA reserve the right to review additional packages for cause. Because the drinking water rules can be complex and raise significant implementation and enforcement issues, we encourage Regions to consult with Headquarters even on subsequent packages, where the revision contains novel language or unique positions which may impact the national program. The Office of General Counsel (OGC) will not directly review the packages, but will depend on the Office of Regional Counsel (ORC) to conduct detailed reviews.

In order to meet the 90 day deadline for packages undergoing Headquarters review, the review period will be equally split giving the Regions and Headquarters each 45 days to conduct their respective reviews. For the first package in each Region, Regions should forward copies of the primacy revision applications that require Headquarters review to the Implementation and Assistance Division in OGWDW. OGWDW will act as the coordinator of Headquarters review and provide OECA with a copy for review. OECA will concur on OGWDW approvals. For all Headquarters reviews, the Regions should send the package to Headquarters as early in the process as possible.

Figure 1: Review Process for State Request for Approval of Program Revisions



A.3. State Program Revision - Extension Procedures

Under §142.12(b), States may request that the 2-year deadline for submitting the complete and final request for EPA approval of program revisions be extended for up to 2 additional years in certain circumstances. The extension request must be submitted to EPA within 2 years of rule promulgation. States can request an extension for the primacy revision process by submitting a written application to the Regional Administrator, who is delegated authority to approve extension requests. Headquarters concurrence is not required.

For an extension to be granted, the State must demonstrate that it is requesting the extension because it cannot meet the original deadline for reasons beyond its control, despite a good faith effort. A critical part of the extension application is the State's proposed schedule for submission of its complete and final request for approval of a revised primacy program. Table 5, "State Program Revision Extension Procedures," gives the requirements and time frame for States that wish to request an extension to the primacy revision process. To receive an extension, States must sign a Memorandum of Understanding (MOU) with the Region. The MOU must cover all aspects of CCR rule implementation, enforcement, and reporting to SDWIS.

	Table 5 - State Program Revision Extension Procedures				
	EPA/State Action Time Frame				
1.	Under 40 CFR 142.12(b)(2), the State extension request must include: (1) A schedule for the submission of a final request by a certain time; and (2) Provide sufficient information to demonstrate (a) and (b) below:	By the primacy revision deadline of August 21, 2000			
	(a) The State cannot submit a package because of one of the reasons below:				
	 Currently lacks the legislative or regulatory authority to enforce the new or revised requirement; or 				
	 Currently lacks the program capability adequate to implement the new or revised requirements; or 				
	 Is requesting the extension to group two or more program revisions in a single legislative or regulatory action. 				
	(b) The State is implementing the requirements to be adopted by the State in its program revision pursuant to 40 CFR 142.12(b)(3) within the scope of its current authority and capabilities.				
2.	EPA Approval/Disapproval of Extension	Completed as soon as possible after submittal of State extension request			

A.4. State/EPA Implementation Agreement

Until States receive updated primacy, EPA is the primacy agent responsible for implementation of this rule. During this interim period, which may cover the first two CCRs, EPA has responsibility to ensure that systems are informed of the rule requirements and provided with training and technical assistance. EPA also has responsibility for compliance with the rule.

Although the first reports will likely be EPA's responsibility, we believe that most States will implement the rule to the extent that their authority allows. To ensure that EPA and States understand their responsibilities, States and EPA Regions must agree on the responsibilities of each party until States receive updated primacy.

One option for documenting this agreement is for the Region to write a letter to the State explaining EPA Regional and State roles. For example, the State and EPA could meet to discuss implementation and agree on roles during the meeting. The Region could then document the agreement and forward it to the State for comment. The final document could be forwarded by the Region to the State and EPA Headquarters. A second option for documenting this agreement is to jointly sign an MOU that describes the States and EPA's roles.

The first option is less burdensome to most States than a bilateral MOU. However, the first option cannot be used after the rule has been promulgated for 2 years. After August 21, 2000, States that have not submitted a complete and final primacy revision application must operate under an extension agreement and jointly sign an MOU with EPA. Appendix B of this guidance contains an example of a draft MOU and a Regional letter to the State.

A.5. Areas of State Flexibility

The CCR rule sets baseline standards to ensure that all consumers receive reports that are nationally consistent and which include the same type and amount of basic information. Where the CCR rule does not specify mandatory language or exact provisions, primacy States have discretion. Changes from the federal requirements in the following areas are allowed but must be spelled out in a State's primacy revision application.

Governor's Mailing Waiver:

Under 40 CFR 141.155(g), the Governor of a State or their designee can waive the mailing requirement for CWSs serving fewer than 10,000 persons. The rule states that a mailing waiver can be granted but States, in accordance with their laws, have the flexibility to establish criteria for obtaining and renewing a mailing waiver. For example, a State can choose whether the waiver should be system-specific or apply to all systems in a given category.

Additional Public Notice:

Under 40 CFR 141.155(d), systems must deliver the report to any other agency or clearinghouse identified by the primacy agency. Examples of other agencies a State may identify

include State and local public health or environment departments, public utility commissions, and consumer advocates.

Alternative Form and Content:

Under 40 CFR 141.151(e), primacy States may adopt by rule, after notice and opportunity for public comment, alternative requirements for the form and content of reports. Only States that have submitted a complete and final primacy revision application can change form and content. Alternative requirements must provide for the same type and amount of information as specified in the federal rule as well as provide an equivalent level of public information and education.

It is important to remember that:

> Until States obtain interim primacy, the CCR rule does not provide States with the flexibility to change form and content.

MCL Reporting Format

EPA requires that MCLs be reported as a number greater than or equal to one because it believes that the use of whole numbers makes it easier for consumers to compare the level of a contaminant in the system's water with the MCL. Focus group research conducted by EPA and the American Water Works Association (AWWA) has shown that consumers understand whole numbers much more easily than decimals. Based on the focus group research, EPA does not believe that reporting the MCL in another format, such as compliance values, provides an equivalent level of public information and education as specified under 40 CFR 141.151(e) of the rule.

Although EPA strongly believes the required MCL reporting format presents the information most clearly and understandably, EPA believes there may be limited conditions under which States can adopt alternative format requirements for the MCL. Cynthia Dougherty, Director of the Office of Ground Water and Drinking Water, clarified in a memorandum dated June 29, 1999 what those limited conditions are. Appendix K of this guidance contains a copy of the June 29, 1999 memorandum.

The memorandum indicates EPA would consider approval of a primacy revision application that allowed MCL reporting in a format other than numbers greater than or equal to one upon a good faith State effort showing the State's public favors the proposed reporting format. EPA believes there should be a high bar for public involvement that should include documented focus group research targeting members of communities served. Representatives from water systems and other drinking water professionals can be involved in the research, but they should not be considered the target audience. If the process shows that consumers find an alternative MCL format easier to understand, EPA would consider approving a State primacy revision application including that format. States should include their EPA region and a wide range of stakeholders in developing any focus group methodology. If a State intends to change the MCL presentation format, EPA recommends that the State submit a draft primacy revision application documenting the methodology and the focus group research and explaining the proposed changes.

Report Content

A summary of areas where report content may be changed is given below in Table 6.

Table 6 - Areas of State Flexibility for Content Requirements				
Citation	Content Requirements	Primacy States Have the Flexibility to		
§141.153(b)	Source Water Assessment Information	Determine the level of detail required in the CCR to summarize the results of a completed source water assessment, in accordance with State priorities and protection goals.		
§141.153(c)	Definitions: MCL, MCLG, TT, AL, and Variances and Exemptions	Alter the wording of the definitions. Note: States must provide standard language that meets the statutory intent of being "brief and plainly worded."		
§141.153(d)(4)(ix)	Likely Source(s) of Detected Contaminants (Appendix B to Subpart O)	Alter the wording of the language provided for typical sources in Appendix B to Subpart O of the rule. Note: States must require systems to include generic information on specific sources where it is available.		
§141.153(d)(6) §141.153(f)(3)-(f)(4)	Potential Adverse Health Effects for Regulated Contaminants (Appendix C to Subpart O)	Alter the wording of the health effects language in Appendix C to Subpart O of the rule. Note: State regulations must require the use of a standard set of health effects language when a contaminant exceeds its MCL, TT, or AL. The language must, at a minimum, list the same health effects as in Appendix C to Subpart O of the rule.		
§141.153(h)(1)	Explanation of Contaminants Reasonably Expected to be Found in Drinking Water, including Bottled Water	Alter the wording of the explanation. Note: States must require the inclusion of an explanation of contaminants that may be in drinking water, including bottled water, and provide reference to EPA's Safe Drinking Water Hotline (800-426-4791).		
§141.154 §141.154(a)	Required Additional Health Information Vulnerable Populations Warning	Alter the wording of the warning for vulnerable populations and educational statements for arsenic, nitrate, and lead. CWSs may further modify the educational statements after consultation with the primacy agency.		
§141.154(b) to (d)	Educational Statements for Arsenic, Nitrate, and Lead	Note: States must require the inclusion of a warning to vulnerable populations about the effects of Cryptosporidium and other microbial contaminants and information on how populations can protect themselves by referring to EPA/CDC guidelines.		

B. General State Primacy Requirements

Each primacy revision application must contain the following sections. Appendix A of this guidance contains example formats that can be used for a State Primacy Revision Application package.

B.1. State Primacy Revision Checklist

This section is a checklist of program elements, taken from 40 CFR 142.10. In completing this checklist, the State must identify the program elements that it has revised in response to new federal requirements. The State should mark a "Yes" or "No" in the blank column next to the list of program elements. If a State indicates "Yes" we ask that they include the specific information/documentation relative to these changes. During the application review process, EPA will insert its findings and comments in the second blank.

B.2. Text of the State's Regulation

Each primacy application package must include the text of the State's regulation.

B.3. Primacy Revision Crosswalk

The Primacy Revision Crosswalk identifies the State statutory or regulatory provisions that correspond to each federal requirement under 40 CFR 141. If the State's provisions differ from federal requirements, we ask the State to explain how their requirements are "no less stringent." The Primacy Revision Crosswalk for the CCR rule should be completely filled out and annotated as necessary.

B.4. Checklist of State Reporting and Recordkeeping Policies

This section is a checklist of State reporting and recordkeeping requirements. The States can use this form to explain how State reporting and recordkeeping requirements are consistent with federal requirements for recordkeeping, 40 CFR 142.14, and reporting, 40 CFR 142.15. If State requirements are not the same as federal requirements, the State can use this form to explain how their requirements are "no less stringent."

B.5. Attorney General's Statement of Enforceability

The application must contain an Attorney General's Statement that the State regulations can be enforced by the State government.

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State Implementation Guidance for the Consumer Confidence Report (CCR) Rule

Appendices A - L

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Appendix A: State Primacy Revision Application Package - Example Format

This appendix describes the elements of a State's Primacy Revision Application package. A State Primacy Revision Application package should contain the following sections:

Section I. State Primacy Revision Checklist

Listing of program elements from 40 CFR 142.10 that the State may have revised in response to the new rule.

Section II. Text of the State's Regulation

Section III. Primacy Revision Crosswalk

Identification of how State regulations correspond to each requirement prescribed of the federal CCR rule.

Section IV. State Reporting and Recordkeeping Checklist

Explanation of how State reporting and recordkeeping requirements are consistent with federal requirements.

Section V. Attorney General's Statement of Enforceability

Statement that State regulations can be enforced by the State government.

Example formats for these sections are presented on the following pages.

After a State's primacy revision application has been approved, the Regional Administrator must provide public notice and opportunity for hearing on EPA's determination. The Regional Administrator is required to publish in the Federal Register the proposed determination, along with a statement of supporting reasons, and notification that a public hearing may be requested. An example of a public notice for Notice of Determination and Public Hearing is also included in this appendix.

Review of State Primacy Revision Application for the Consumer Confidence Report (CCR) Rule

CONTENTS:

I. § 142.10 Requirements - State Primacy Revision Checklist

II. Text of the State's Regulation

III. § 141 Requirements - Primacy Revision Crosswalk

IV. § 142.16 - State Reporting and Recordkeeping Requirements

V. Attorney General's Statement of Enforceability

State:	
Date Application Submitted:	
Date Review Completed:	
EPA Region:	
Review Staff:	

Section I. State Primacy Revision Checklist - Example Format

The State Primacy Revision Checklist is a listing of program elements from 40 CFR 142.10 that the State may have revised in response to the new rule. For the CCR rule, most States will revise only §142.10(b)(6)(vii) authority to require community water systems (CWSs) to issue CCRs.

State Primacy Revision Checklist					
Requir	ed Program Elements	Revision to State Program (Yes or No)	EPA Findings/Comments		
§142.10	Primary Enforcement				
§142.10(a)	Regulations No Less Stringent		e		
§142.10(b)(1)	Maintain Inventory				
§142.10(b)(2)	Sanitary Survey Program				
§142.10(b)(3)	Laboratory Certification Program				
§142.10(b)(4)	Laboratory Capability	:			
§142.10(b)(5)	Plan Review Program				
§142.10(b)(6)(i)	Authority to Apply Regulations				
§142.10(b)(6)(ii)	Authority to Sue in Courts of Competent Jurisdiction				
§142.10(b)(6)(iii)	Right of Entry				
§142.10(b)(6)(iv)	Authority to Require Records				
§142.10(b)(6)(v)	Authority to Require Public Notification				
§142.10(b)(6)(vi)	Authority to Assess Civil and Criminal Penalties				
§142.10(b)(6)(vii)	Authority to Require CWSs to Provide CCRs				
§142.10(c)	Maintenance of Records				
§142.10(d)	Variance/Exemption Conditions				
§142.10(e)	Emergency Plans				
§142.10(f)	Administrative Penalty Authority				

Section II. Text of State's Regulation

The text of the State's regulation should be included in this section.

Section III. Primacy Revision Crosswalk - Example Format

The Primacy Revision Crosswalk will be used by EPA in determining, section by section, whether the State regulations are as stringent as the federal regulations.

Primacy Revision Crosswalk for the CCR Rule				
FEDERAL REQUIREMENT	FEDERAL CITATION	STATE CITATION Document title; page #; and § or ¶	If different than federal requirement, note here and explain on a separate sheet	
DEFINITIONS				
Customers	§141.151(c)			
Detected	§141.151(d)			
Maximum Contaminant Level Goal (MCLG)	§141.153(c)(1)(i)			
Maximum Contaminant Level (MCL)	§141.153(c)(1)(ii)			
Variances and Exemptions	§141.153(c)(2)			
Treatment Technique (TT)	§141.153(c)(3)(i)			
Action Level (AL)	§141.153(c)(3)(ii)			
GENERA	AL REQUIREMENTS - §	141.152		
EFFECTIVE DATES				
CCR delivery dates:	§141.152(b)			
A CWS must deliver the CCR to customers by:				
 October 19, 1999 for the first CCR. 				
► July 1, 2000 for the second CCR.				
 July 1 annually thereafter for subsequent reports. 				
New CWSs must deliver their first CCR by July 1 after the first full calendar year in operation and annually thereafter.	§141.152(c)			

Primacy Revision Crosswalk for the CCR Rule				
FEDERAL REQUIREMENT	FEDERAL CITATION	STATE CITATION Document title; page #; and § or ¶	If different than federal requirement, note here and explain on a separate sheet	
A CWS that sells water to another CWS must provide the buyer with information to prepare the reports by April 19, 1999 for the first CCR and by April 1 annually thereafter for subsequent reports. Data must be provided by these dates unless a different date is mutually agreed upon by the seller and buyer and specified in the contract between the two parties.	§141.152(d)			
CONTENT (OF THE CCRs - §141.15	53; §141.154		
CWS must provide an annual report containing information from §141.153 and §141.154.	§141.153(a)			
Information on the source of the water delivered	§141.153(b)			
 Identify the type and name and location of the body or bodies of water. 	§141.153(b)(1)			
 If a source water assessment is completed, include the following information: 	§141.153(b)(2)			
 Notify customers of availability of the assessment and how to obtain it. 			,	
 Systems are encouraged to highlight contamination in the source water area(s) if the information is available (Not Required but Recommended). 	·			
 If the information is available, provide a brief summary of the system's susceptibility to potential sources of 				

Primacy Revision Crosswalk for the CCR Rule				
FEDERAL REQUIREMENT	FEDERAL CITATION	STATE CITATION Document title; page #; and § or ¶	If different than federal requirement, note here and explain on a separate sheet	
contamination using language provided by the primacy agency or written by the operator.	·		. *	
INFORMATION ON DETECTED CONTAMINANTS				
Systems must report information for the following contaminants subject to mandatory monitoring (except <i>Cryptosporidium</i>).	§141.153(d)(1)	. :		
► Regulated contaminants.	§141.153(d)(1)(i)		,	
 Unregulated contaminants. 	§141.153(d)(1)(ii)			
 Disinfection byproducts or microbial contaminants in finished water. 	§141.153(d)(1)(iii)		,	
Data for detected contaminants must be displayed in a table or several adjacent tables. Display any additional monitoring results separately.	§141.153(d)(2)			
Systems must use data collected to comply with EPA and State monitoring and analytical requirements during the calendar year 1998 for the first report and subsequent calendar years after that.	§141.153(d)(3)			
Systems that monitor for regulated contaminants less than once a year, must include the date and results of the most recent sampling and a brief statement that data presented is from the most recent testing done in accordance with regulations.	§141.153(d)(3)(i)			
 Systems must include results of monitoring in compliance with §141.142 and §141.143 	§141.153(d)(3)(ii)			

Primacy Revision Crosswalk for the CCR Rule			
FEDERAL REQUIREMENT	FEDERAL CITATION	STATE CITATION Document title; page #; and § or ¶	If different than federal requirement, note here and explain on a separate sheet
for 5 years from the date of the last sample or until the detected contaminants become regulated and subject to routine monitoring requirements, whichever comes first.			
Data requirements for detected regulated contaminants in the table(s)	§141.153(d)(4)		
 Report MCL as a number greater than or equal to one. 	§141.153(d)(4)(i)		
 Report MCLG in the same units as the MCL. 	§141.153(d)(4)(ii)		
If there is no MCL, then report the TT or AL as applicable and the report must include definitions for TT and AL.	§141.153(d)(4)(iii)		1
 For contaminants subject to an MCL, except turbidity and total coliforms, report the highest detected level used to determine compliance with an NPDWR and the range of detected levels expressed in the same units as the MCL. 	§141.153(d)(4)(iv)		
- If compliance with the MCL is determined annually or less frequently, report the highest level at any sampling point and the range of detected levels.	§141.153(d)(4)(iv)(A)		

Primacy Rev	ision Crosswalk for t	he CCR Rule	
FEDERAL REQUIREMENT	FEDERAL CITATION	STATE CITATION Document title; page #; and § or ¶	If different than federal requirement, note here and explain on a separate sheet
- If compliance with the MCL is determined by calculating a running annual average of all samples taken at a sampling point, report the highest average of any of the sampling points and the range of all sampling points.	§141.153(d)(4)(iv)(B)		
- If compliance with the MCL is determined on a system-wide basis by calculating a running annual average of all samples at all sampling points, report the average and range of detection.	§141.153(d)(4)(iv)(C)		
Turbidity Data Requirements	§141.153(d)(4)(v)		
when reported pursuant to:			
 §141.13 - include the highest average monthly value. 	§141.153(d)(4)(v)(A)	·	
 §141.71 - include the highest monthly value and an explanation of the reasons for measuring turbidity. 	§141.153(d)(4)(v)(B)		
§141.73 or § 141.173 - include the highest single measurement and the lowest monthly percentage of samples meeting turbidity limits for the filtration technology used and an explanation of the reasons for measuring turbidity.	§141.153(d)(4)(v)(C)		
Lead and Copper Data Requirements	§141.153(d)(4)(vi)		
Include the 90th percentile value of the most recent round of sampling			

Primacy Rev	rision Crosswalk for t	the CCR Rule	
FEDERAL REQUIREMENT	FEDERAL CITATION	STATE CITATION Document title; page #; and § or ¶	If different than federal requirement, note here and explain on a separate sheet
and the number of sampling sites exceeding the action level.			
Total Coliform Data Requirements	§141.153(d)(4)(vii)		
 For systems collecting less than 40 samples per month, report the highest monthly number of positive samples. 	§141.153(d)(4)(vii)(A)		·
 For systems collecting at least 40 samples per month, report the highest monthly percentage of positive samples. 	§141.153(d)(4)(vii)(B)		
Fecal Coliform Data Requirements	§141.153(d)(4)(viii)	·	
Report the total number of positive samples.			
Likely Source(s) of Detected Contaminants	§141.153(d)(4)(ix)		
The likely source(s) of detected contaminants to the best of the operator's knowledge must be included in the report. If the CWS operator lacks specific information on the likely source of detected contaminants, applicable language from Appendix B to Subpart O must be used.			
CWSs that distribute water from multiple hydraulically independent distribution systems fed by different raw water sources, should include in the table 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. (Not Required but Recommended)	§141.153(d)(5)		

Primacy Rev	ision Crosswalk for t	he CCR Rule	
FEDERAL REQUIREMENT	FEDERAL CITATION	STATE CITATION Document title; page #; and § or ¶	If different than federal requirement, note here and explain on a separate sheet
Systems must clearly identify any data that indicates violations of MCLs or TTs and explain:	§141.153(d)(6)		
(1) the length of the violation.			
(2) potential adverse health effects, using language from Appendix C to Subpart O.			
(3) actions taken by the system to address the violation.	,		
For detected unregulated contaminants for which monitoring is required (except <i>Cryptosporidium</i>), systems must report the average and range of detection. The report may include a brief explanation of the reasons for monitoring for unregulated contaminants.	§141.153(d)(7)		
Information on <i>Cryptosporidium</i> , Radon, and Other Contaminants	§141.153(e)		
If monitoring indicates Cryptosporidium may be present in the source water or finished water, include a summary of the monitoring results and an explanation of the significance of the results.	§141.153(e)(1)		
If monitoring indicates radon may be present in finished water, include the results of monitoring and an explanation of the significance of the results.	§141.153(e)(2)		
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. For such contaminants, include monitoring results and an	§141.153(e)(3)		

Primacy Revision Crosswalk for the CCR Rule			
FEDERAL REQUIREMENT	FEDERAL CITATION	STATE CITATION Document title; page #; and § or ¶	If different than federal requirement, note here and explain on a separate sheet
explanation of the significance of the results. (Not Required but Recommended)			
Compliance with NPDWR	§141.153(f)		-
CWSs must note violations of the requirements listed below in the CCR. A brief explanation of violations, potential adverse health effects, and steps taken to address the violation must be included in the report.		,	
Monitoring and reporting of compliance data.	§141.153(f)(1)		
Filtration and disinfection prescribed by Subpart H of 40 CFR 141. An explanation of violations of those requirements must be included and contain mandatory language provided by EPA.	§141.153(f)(2)		
Lead and copper control requirements prescribed by Subpart I of 40 CFR 141. An explanation of violations of those requirements must be included and contain applicable language from Appendix C to Subpart O.	§141.153(f)(3)		
Treatment techniques for acrylamide and epichlorohydrin prescribed by Subpart K of 40 CFR 141. An explanation of violations of those requirements must be included and contain applicable language from Appendix C to Subpart O.	§141.153(f)(4)		
Recordkeeping of compliance data.	§141.153(f)(5)		
Special monitoring requirements prescribed by §141.40 for inorganic and organic contaminants and §141.41 for sodium.	§141.153(f)(6)		·

Primacy Rev	Primacy Revision Crosswalk for the CCR Rule		
FEDERAL REQUIREMENT	FEDERAL CITATION	STATE CITATION Document title; page #; and § or ¶	If different than federal requirement, note here and explain on a separate sheet
Violation of the terms of a variance, an exemption, or an administrative or judicial order.	§141.153(f)(7)		
Variances and Exemptions	§141.153(g)		
Systems operating under a variance or exemption must provide:			
 An explanation of the reasons for the variance or exemption. 	§141.153(g)(1)		·
➤ The date of issue.	§141.153(g)(2)		
 A brief status report on the steps the system is taking to comply with the terms and schedules of the variance or exemption. 	§141.153(g)(3)		
 A notice of any opportunity for public input in the review, or renewal of the variance or exemption. 	§141.153(g)(4)		
Additional Information	§141.153(h)		
Systems must provide an explanation of the contaminants reasonably expected to be found in drinking water, including bottled water. The explanation must:	§141.153(h)(1)		
Include information on sources of drinking water, contaminants that may be present in source water, and EPA/FDA regulations. Systems can use language provided by EPA in §141.153(h)(1)(i) through (iii) or develop their own comparable language.			

Primacy Rev	vision Crosswalk for	the CCR Rule	
FEDERAL REQUIREMENT	FEDERAL CITATION	STATE CITATION Document title; page #; and § or ¶	If different than federal requirement, note here and explain on a separate sheet
The sources of drinking water (both tap water and bottled water) include rivers, 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.	§141.153(h)(1)(i)		
Contaminants that may be present in source water include:	§141.153(h)(1)(ii)		
Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.	§141.153(h)(1)(ii)(A)		
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.	§141.153(h)(1)(ii)(B)		
Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.	§141.153(h)(1)(ii)(C)		
Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production and can also come from gas stations, urban stormwater runoff, and septic systems.	§141.153(h)(1)(ii)(D)	·	

Primacy Rev	Primacy Revision Crosswalk for the CCR Rule		
FEDERAL REQUIREMENT	FEDERAL CITATION	STATE CITATION Document title; page #; and § or ¶	If different than federal requirement, note here and explain on a separate sheet
Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.	§141.153(h)(1)(ii)(E)		
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.	§141.153(h)(1)(iii)		
Include language in §141.153(h)(1)(iv), shown below:	§141.153(h)(1)(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).			
Include the telephone number of the owner, operator, or designee of the CWS as a source of additional information on the report.	§141.153(h)(2)		
Information in the appropriate language for communities with a large proportion of non-English speaking residents	§141.153(h)(3)		
The report must include information in the appropriate language(s) regarding the importance of the report or contain			

Primacy Rev	vision Crosswalk for	the CCR Rule	
FEDERAL REQUIREMENT	FEDERAL CITATION	STATE CITATION Document title; page #; and § or ¶	If different than federal requirement, note here and explain on a separate sheet
a telephone number or address where residents can contact the system to obtain a translated copy of the report or assistance in the appropriate language.			
Information about opportunities for public participation in decisions that may affect the quality of the water.	§141.153(h)(4)		
Additional information the CWS deems necessary for public education consistent with and not detracting from the purpose of the report.	§141.153(h)(5)		
REQUIRED ADDITIONAL HEALTH INFORMATION	§141.154		
Must display EPA language concerning increased vulnerability of segments of the population such as immuno-compromised persons to drinking water contaminants.	§141.154(a)		
Informational statement about arsenic if a system detects arsenic levels > 25 μ g/l, but below the MCL.	§141.154(b)		
Informational statement about nitrate if a system detects nitrate levels > 5 mg/l, but below the MCL.	§141.154(c)	·	
Informational statement about the special impact of lead on children for systems that detect lead above the action level in more than 5% and up to and including 10% of homes sampled.	§141.154(d)		
CWSs that detect TTHMs above 0.080 mg/l, but below the MCL in Section 141.12, as an annual average, monitored and calculated under the provisions of Section 141.30, must include health effects language provided by paragraph (73) of Appendix C to Subpart O.	§141.154(e)		

Primacy Revision Crosswalk for the CCR Rule			
FEDERAL REQUIREMENT	FEDERAL CITATION	STATE CITATION Document title; page #; and § or ¶	If different than federal requirement, note here and explain on a separate sheet
REPORT DELIVERY AND RECORDKEEPING REQUIREMENTS FOR CWSs	§141.155		
Mail or direct-deliver the CCR to customers.	§141.155(a)		
Use "good faith" efforts to reach non- bill paying consumers.	§141.155(b)	·	
No later than the date the CWS is required to distribute the CCR to its customers, the CWS must mail a copy of the CCR to the primacy agency and within 3 months of the required CCR delivery date send certification to the primacy agency that the information is correct and consistent with the compliance monitoring data previously submitted to the primacy agency.	§141.155(c)		
Deliver report to any other agency identified by primacy agency no later than required date for distribution to customers.	§141.155(d)		
CWS must make CCRs available upon request.	§141.155(e)		
CWS serving 100,000 or more must post CCR on a publicly accessible Internet site.	§141.155(f)		

Primacy Re	Primacy Revision Crosswalk for the CCR Rule		
FEDERAL REQUIREMENT	FEDERAL CITATION	STATE CITATION Document title; page #; and § or ¶	If different than federal requirement, note here and explain on a separate sheet
Mailing Waiver for Systems Serving Fewer than 10,000 Persons	§141.155(g)	·	
The following authorities can waive the mailing requirements for systems serving fewer than 10,000 persons:			
 The Governor of a State or his/her designee. 			
 Tribal leader if the Tribe has met the §142.72 requirements. 			
 The EPA Regional Administrator in consultation with the Tribal government when no Tribe is deemed eligible. 			
A CWS serving fewer than 10,000 persons must:	§141.155(g)(1)		
 Publish reports in one or more local newspapers. 	§141.155(g)(1)(i)		;
 Inform customers that the CCR will not be mailed. 	§141.155(g)(1)(ii)		
 Make the CCR available to the public upon request. 	§141.155(g)(1)(iii)		
A CWS serving 500 or fewer persons can forego requirements of §141.155(g)(1)(i) and (ii) listed above if they provide notice at least once a year to their customers by mail, door-to-door delivery, or by posting in an appropriate location that the report is available upon request.	§141.155(g)(2)		
CWS must keep copies of CCR for at least 5 years.	§141.155(h)		

Section IV. State Reporting and Recordkeeping Checklist - Example Format

States can use this form to explain how State reporting and recordkeeping requirements are consistent with federal requirements for recordkeeping, 40 CFR 142.14, and reporting 40 CFR 142.15. If the State's provisions differ from federal requirements, the State can use this form to explain how their requirements are no less stringent.

State Reporting and Recordkeeping Checklist		
Requirement	Are State Policies Consistent with Federal Requirements? If Not, Explain	
§142.16 (f) - Records Kept By The States		
Each State that has primary enforcement responsibility must make CCRs submitted to the State in compliance with 40 CFR 155(c) available to the public upon request.		
Each State that has primary enforcement responsibility must maintain a copy of the CCRs for a period of 1 year.		
Each State that has primary enforcement responsibility must keep a copy of the certifications obtained pursuant to 40 CFR 141.155(c) for a period of 5 years.		
Each State that has primary enforcement responsibility must report violations of 40 CFR 141, Subpart O in accordance with the requirements of §142.15(a)(1).		
§142.15(a)(1): Each State which has primary enforcement responsibility shall submit quarterly reports to the Administrator on a schedule and in a format, prescribed by the Administrator that contains information on violations by PWSs during the previous quarter of State regulations adopted to incorporate the requirements of the NPDWR.		

Section V. Attorney General's Statement of Enforceability - Example Format

Model Language
I hereby certify, pursuant to my authority as(1) and in accordance with the Safe Drinking Water Act as amended, and(2), that in my opinion the laws of the State/Commonwealth] of(3) [or Tribal ordinances of(4)] to carry out the program set forth in the "Program Description" submitted by the(5) have been duly adopted and are enforceable. The specific authorities provided are contained in statutes or regulations that are lawfully adopted at the time this Statement is approved and signed and will be fully effective by the time the program is approved.
Guidance and Model Language For States on Audit Privilege and/or Immunity Laws
In order for EPA to properly evaluate the State's request for approval, the State Attorney General or independent legal counsel should certify that the State's environmental audit immunity and/or privilege and immunity law does not affect its ability to meet enforcement and information gathering requirements under the Safe Drinking Water Act. This certification should be reasonably consistent with the wording of the State audit laws and should demonstrate how State program approval criteria are satisfied.
EPA will apply the criteria outlined in its "Statement of Principles" memo issued on 2/14/97 in determining whether States with audit laws have retained adequate enforcement authority for any authorized federal programs. The principles articulated in the guidance are based on the requirements of federal law, specifically the enforcement and compliance and State program approval provisions of environmental statutes and their corresponding regulations. The Principles provide that if provisions of State law are ambiguous, it will be important to obtain opinions from the State Attorney General or independent legal counsel interpreting the law as meeting specific federal requirements. If the law cannot be so interpreted, changes to State laws may be necessary to obtain federal program approval. Before submitting a package for approval, States with audit privilege and/or immunity laws should initiate communications with appropriate

Model Language For States with No Audit Privilege and/or Immunity Laws

privilege and/or immunity law.

Furthermore, I certify that [State/Commonwealth of _	(3)	has not enacted any
environmental audit privilege and/or immunity laws.		•

EPA Regional Offices to identify and discuss the issues raised by the State's audit

Model Language For States with Audit Laws that Do Not Apply to the State Agency Administering the Safe Drinking Water Act

Furth	ermore. I certif	y that the environ	mental [audit priv	rilege and/or	immunity lav	w] of the [State
		(3)				
		ormation gathering				
		ınd/or immunity la				
		Safe Drinking Wa				
		(5)				
nrogr	ams implemen	ted by(5)_	, and [addit piles th	us the progra	am set forth i	n the "Program
Descr	intion" is unaf	fected by the provi	sions of [State/Co	mmonwealtl	$n ext{ of } (3)$)
	_	or immunity law].		Jimmon W Care	(2	· J
Laudin	privilege and	or minimanty law].				
Mode	el Language F	or States with Au	ıdit Privilege and	d/or Immun	ity Laws tha	t Worked with
		uirements for Fed				
Progr	_			-		
		•	•	,		
Furth	ermore, I certif	y that the environ	mental [audit priv	ilege and/or	immunity lav	v] of the [State
		(3)				
enfor	cement and inf	ormation gatherin	g requirements ur	der the Safe	Drinking Wa	ater Act because
[State	/Commonwea	lth of(3)] has e	enacted statu	tory revisions	and/or issued
clarif	ving Attorney	General's statemer	nt to satisfy requir	ements for fe	derally autho	rized, delegated
		mental programs.	• •		-	
	•	1 5				
i		•				
Seal	of Office				-	
		Signature		_		
		Name and Title				
	•					•
		Date			·	
	,	Date			r vr	
(1)	Attorney Ge	neral or attorney for	or the primacy ag	ency if it has	independent	legal counsel
` ,						•
(2)	40 CFR 142	.12 (c)(1)(iii) for f	inal requests for a	pproval of pr	rogram revisi	ons
(3)	Name of Sta	te or Commonwea	alth			
(4)	Name of Tri	be			* '	
(5)	Name of Pri	macy Agency				
(2)	LAUTHE OF LIF	macy rigomoy				

Notice of Determination and Request for Public Hearing - Example Format

ENVIRONMENTAL PROTECTION AGENCY PUBLIC WATER SYSTEM SUPERVISION PROGRAM REVISION FOR THE STATE OF [insert name]

AGENCY: ENVIRONMENTAL PROTECTION AGENCY (EPA)

ACTION: Notice of Tentative Approval

SUMMARY: Notice is hereby given that the State of [insert name] is revising its approved Public Water System Supervision Program. The State of [insert name] has adopted drinking water regulations requiring consumer confidence reports from all community water systems. EPA has determined that these revisions are no less stringent than the corresponding federal regulations. Therefore, EPA intends to approve these State program revisions.

All interested parties may request a public hearing. A request for a public hearing must be submitted by [insert date 30 days from date of publication in the Federal Register] to the Regional Administrator at the address shown below. Frivolous or insubstantial requests for a hearing may be denied by the Regional Administrator. However, if a substantial request for a public hearing is made by [insert date 30 days from date of publication in the Federal Register], a public hearing will be held. If no timely and appropriate request for a hearing is received and the Regional Administrator does not elect to hold a hearing on his own motion, this determination shall become final and effective on [insert date 30 days from date of publication in the Federal Register].

Any request for a public hearing shall include the following information: (1) The name, address, and telephone number of the individual organization, or other entity requesting a hearing; (2) A brief statement of the requesting person's interest in the Regional Administrator's determination and a brief statement of the information that the requesting person intends to submit at such hearing; (3) The signature of the individual making the request, or, if the request is made on behalf of an organization or other entity, the signature of a responsible official of the organization or other entity.

ADDRESSES:	All document	s relating to this determination	are available for inspection b	oetween
the hours of	a.m. and	p.m., Monday through Friday,	at the following office:	
[insert address]			J	

FOR FURTHER INFORMATION CONTACT: [insert contact name and information]

(Section 1420 of the Safe Drinking Water Act, as amended (1996), and 40 CFR Part 142 of the National Primary Drinking Water Regulations)

Dated:	
Regional Administrator	
EPA, Region	

Appendix B: State/EPA Implementation Agreement

Under 40 CFR 142.12, States must adopt the requirements of the CCR rule within 2 years of the final rule's publication or by August 21, 2000. States and EPA will implement the regulation in partnership at least for the first set of reports, since most States will likely not have updated primacy for this rule by October 19, 1999 when the first reports are due. An implementation agreement such as a letter from the Region to the State or another document such as Memorandum of Understanding (MOU) is necessary to document the State and EPA Regional roles that would lead to successful implementation of the rule. Although the letter from the Region to the State is less burdensome to most States than a bilateral MOU, it cannot be used after the rule has been promulgated for 2 years. After August 21, 2000 States that have not submitted a complete and final primacy revision application must apply for an extension and jointly sign an MOU with EPA. A sample letter from a Region to a State and a sample MOU is presented on the following pages.

At a minimum, all implementation agreements should cover informing the systems, checking that all CWSs issued CCRs, and a check on the quality of some CCRs. Such a check could include all systems serving 10,000 or more, all SNCs, a random check, or some other agreed upon check. The list of items to track are suggestions. States and Regions may agree upon additional items to track based on the circumstances in each State. If the State believes it is inappropriate to agree to a check on the quality of some CCRs, before an EPA policy on compliance assistance is final, then the Region and State should agree to develop a written plan for the quality check at a later date but before CCRs are scheduled to be issued (October 1999).

All CWSs must be notified of their responsibility to comply with the CCR regulation and prepare and distribute the first CCR by October 19, 1999. A sample letter from the State notifying a CWS of the CCR requirements has also been included in this appendix.

Sample Letter from EPA Region to State	. B-2
Sample Memorandum of Understanding	. B-5
Sample CCR Notification Letter from State to Community Water Systems	. B-9

Sample Letter from EPA Region to State

Date

Name of State Agency Address of State Agency

Re: Regional-State EPA Agreement on Consumer Confidence Report (CCR) Implementation

Dear (Name of State Agency Representative(s)):

On August 19, 1998, the U.S. Environmental Protection Agency (EPA) published final regulations requiring all community water systems (CWSs) to provide their customers with an annual water quality report or Consumer Confidence Report (CCR). These regulations amend the National Primary Drinking Water Regulations, 40 CFR Part 141 and the regulations for implementation of the National Primary Drinking Water Regulations, 40 CFR Part 142. This rulemaking took effect September 18, 1998 and stipulates that CWSs must issue their first CCR by October 19, 1999 and then annually by each July 1. EPA's goal, especially for the first set of reports is to aid and assist States and systems in complying with this new regulation.

In accordance with the updated 40 CFR 142.12, (<u>Name of State</u>) must adopt regulations pertaining to the CCR and submit a complete and final primacy revision application by August 21, 2000, unless granted an extension. Since it is likely that (<u>Name of State</u>) will not have their own rules in place when the first reports are due, EPA Region <u>and (Name of State Agency</u>) have agreed to implement the rule in partnership at least for the first set of reports, until the State receives updated primacy.

On <u>Date</u>, representatives from the EPA Region _ and (<u>Name of State Agency</u>) met to discuss the responsibilities of each party during this interim period. This letter records the negotiated agreement on implementation roles and responsibilities between (<u>Name of State Agency</u>) and EPA Region __. The negotiated tasks are shown in the attached sheet.

We look forward to working with (<u>Name of State Agency</u>) to make these reports a useful and effective opportunity to promote the quality of public drinking water.

Sincerely,

EPA Regional Office

CCR Implementation Responsibilities

Activities to be carried out by EPA Region ____

- Provide training to State staff and, when possible, to water system operators by April 1999.
- Provide ongoing assistance to State with public outreach efforts to inform and educate consumers about CCR requirements, including coordinating with water associations to increase awareness of requirements.
- Forward national guidance to the State and prepare additional guidance/training materials as needed.
- Keep State informed of the Safe Drinking Water Information System (SDWIS) reporting requirements during development and implementation.
- Track compliance and provide assistance where necessary.
- Notify States of all federal enforcement actions.

Activities to be carried out by the State/(Name of State Agency):

- Notify systems of the requirement to produce and distribute a CCR.
- If the State opts to use the mailing waiver for small systems, it will obtain the Governor's waiver for the small systems mailing requirement, and provide the waiver to EPA, Region _____ within 60 days of receipt.
- Identify other State agencies that should receive copies of the CCR. Provide CWSs with the names, addresses, and phone numbers of contacts to distribute CCR to within those agencies by August 1999.
- Train State staff and CWSs on the required content for CCRs by April 1999.
- Devise a tracking system for CCRs and certification letters by October 1999.
- Issue notices to systems which fail to produce and mail a CCR
- Good faith effort to check the quality of some CCRs (specify procedures)
- Provide copies of the CCR in response to public inquiries after the 1st CCR produced.

- Notify any new CWSs of the requirements to produce and distribute a CCR by July 1 after the first full year of operation.
- Report CCR violation and enforcement information to SDWIS as required after the first report is due.

Sample Memorandum of Understanding

Name of State Agency U.S. Environmental Protection Agency Region Memorandum of Understanding for the Consumer Confidence Report (CCR) Regulation

On August 19, 1998, the U.S. Environmental Protection Agency (EPA) published final regulations requiring Consumer Confidence Reports (CCRs) from community public water suppliers. These regulations amend the National Primary Drinking Water Regulations, Part 141 and the regulations for implementation of the National Primary Drinking Water Regulations, Part 142. This rulemaking took effect September 18, 1998 and community water systems (CWSs) have 13 months in which to publish their first report, or by October 19, 1999.

EPA recognizes that most States will not have their own rules in place until after the first or second CCR is required to be published by each CWS. The April 28, 1998 revisions to the Primacy rule extend the time allowed for States to adopt new federal regulations from 18 months to 2 years. Therefore, the State must adopt regulations pertaining to CCRs and submit complete and final primacy revision applications by August 21, 2000. In addition, States may request an extension of up to 2 years to adopt new or revised regulations.

This document records the terms of a Primacy Memorandum of Understanding between the (<u>Name of State Agency</u>) (the State) and the EPA, Region _____ for the CCR rule, and shall remain effective from the date this MOU is signed until either August 21, 2000 or the date the State's primacy application is submitted under 40 C.F.R. §142.12, whichever comes first. To retain primacy the State must transmit a final and approvable Primacy Revision Application incorporating the provisions of FR, August 19, 1998 to EPA, Region _____ by August 21, 2000 or no later than August 21, 2002 if the State has been granted an extension.

Until the State Primacy Revision Application has been submitted, the State and EPA, Region will share responsibility for implementing the primary program elements as indicated below. For the sake of convenience, the implementation milestones that the State and EPA, Region have agreed to are listed in the attached checklist.

This Memorandum of Understanding, signed by both agencies, outlines the responsibilities of (Name of State Agency) and EPA, Region _____ and encourages all parties to become partners in this effort, working toward two very specific goals. The first goal is to achieve a high level of compliance with the regulation. The second goal is to facilitate successful implementation of the regulation during the transition period before the State has interim primacy for the rule. In order to accomplish these goals, education and training will need to be provided to water suppliers on their responsibilities to produce CCRs that educate and inform the public.

Activities to be carried out by the State:

- Notify CWSs within 60 days of signing this MOU of the requirement to produce and distribute a CCR.
- If the State opts to use the mailing waiver for small systems, it will obtain the Governor's waiver for the small systems mailing requirement, and provide the waiver to EPA, Region ____ within 60 days of receipt.
- Identify other State agencies that should receive copies of the CCR. Provide CWSs with the names, addresses, and phone numbers of contacts within those agencies. CCRs must be distributed to those agencies within 60 days of signing this MOU.
- Train State staff and CWSs on the required content for CCRs.
- Devise a tracking system for CCRs and certification letters.
- Issue notices to systems which fail to produce and mail a CCR or fail to provide a certification letter.
- Provide copies of the CCR in response to public inquiries.
- Notify any new systems of the requirements to produce and distribute a CCR by July 1 after the first full year of operation
- Report CCR violation and enforcement information to SDWIS as required.

Activities to be carried out by EPA Region____

- Provide training to State staff and, when possible, to water system operators.
 - Coordinate with water associations to increase awareness of requirements.
 - Assist with public outreach efforts to inform and educate consumers of this upcoming report.
 - Prepare guidance as needed, or forward national guidance to the States.
 - Keep States informed of SDWIS reporting requirements during development and implementation.
 - Compliance assistance.
 - Notify States of all federal enforcement actions.

This Memorandum of	Understanding	will take effect u	pon the date	of the last signature.

Dated this	day of	1999
State Representative,	Title	
Name of State Agence	У	
Dated this	day of	, 1999
EPA Representative,	Title	

* Signatures could be at the level of the Safe Drinking Water Branch Chief for EPA and the corresponding level at the State. Signatures should have the legal authority to bind EPA or the State to the duties described herein.

An alternate format for documenting EPA and State CCR implementation responsibilities described in the MOU is provided below. This example format could be attached to the MOU.

Implementation Milestone Checklist				
Program Element	Implementation Milestone	State	EPA	
Notify Community Water Systems (CWSs) of CCR requirements.	Within 60 days of signing this MOU but no later than			
Give CWSs names, addresses, phone numbers, and contact names for other State agencies that must receive CCR.	Within 60 days of signing this MOU.			
Assist with public outreach efforts to inform and educate consumers. Coordinate with water associations to increase awareness of requirements.	Ongoing			
Prepare guidance as needed or forward national guidance to the States.	Ongoing			
Provide training to State staff and when possible water system operators.	Ongoing			
Obtain Governor's waiver for small systems mailing requirement(if State uses mailing waiver for small systems).	As soon as practicable after regulation becomes effective.			
Provide a copy of Governor's mailing waiver to EPA, Region	Within 60 days of obtaining waiver.			
Keep States informed of SDWIS reporting requirements during development and implementation.	Ongoing			
Report CCR violation and enforcement to SDWIS as required.	Begin after first report due date.			
Track compliance with report completion. Report information to USEPA by February 15, 2000.	Ongoing			
Issue notices to CWSs that fail to produce and mail a CCR or provide a certification letter.	Second annual reporting period (beginning 01/2000).			
Good faith effort to check the quality of some CCRs (specify procedures).	Begin after the first report due date.			
Provide copies of the CCR in response to public inquiries.	After 1 st CCR produced.			
Provide compliance assistance.	Ongoing			
Notify States of all federal enforcement violations.	Ongoing			
Notify any new CWSs of the CCR requirements.	As systems become known.			

Sample CCR Notification Letter from the State to Community Water Systems

Dear Community Water System (CWS) Owner/Operator,

I am writing to ask you to prepare a Consumer Confidence Report (CCR) and deliver it to your customers. Consumer awareness/right-to-know was a theme of the 1996 Safe Drinking Water Act (SDWA) Amendments. These amendments confirmed the importance of educating the consumer and added new responsibilities for water systems in this area. The CCR rule is the first new regulation from EPA in several years and the first to address the public right-to-know provisions of the 1996 SDWA Amendments.

The CCR rule requires all CWSs to provide drinking water quality reports to their customers, with the first report due by October 19, 1999 and subsequent reports annually thereafter by July 1. These reports or CCRs are intended to be short documents written for a non-technical audience and must contain information on:

- Source(s) of local water, and availability of source water assessment data.
- Levels of detected contaminants, corresponding Maximum Contaminant Levels (MCLs) and Maximum Contaminant Level Goals (MCLGs), and typical sources.
- Potential health effects of contaminants detected in violation of an MCL/Treatment Technique (TT), or exceeding an Action Level (AL).
- Opportunities for public participation in drinking water related decisions.

Water systems are free to enhance the reports in any useful way, but must follow the required minimum content and format criteria. Attachment 1 provides an overview of the CCR requirements and a list of resources to assist you in preparing CCRs.

The CCR provides an excellent opportunity to showcase the good work your system does to provide customers with the highest quality drinking water. We recommend that CWSs begin preparing their first CCR well before the October deadline. In order to help systems meet the regulatory deadlines, EPA has developed a CCR implementation guidance document, a "how to" manual for CWSs on preparing CCRs, and is developing a computerized "fill-in-the blank" template to create a CCR. Final versions of these materials are scheduled for release beginning in summer 1999.

In the interim, the <u>Name of State's Drinking Water Program</u> will be conducting CCR training workshops and preparing educational/outreach materials for systems. We encourage you to take full advantage of the opportunity the CCR provides to tell the public about the quality of their drinking water because informed and involved consumers can be strong allies of water systems, large and small.

Sincerely,

State Drinking Water Program Attachment

Attachment 1

CCR Minimum Report Content Requirements

1. Water System Information

- System contact number for additional information.
- For communities with a large proportion of non-English speaking residents (as determined by State) information in appropriate language about importance of CCR.
- Dates and times of public meetings.

2. Source(s) of Drinking Water

- Type of water; commonly-used names; and location of water source(s).
- Information on source water assessments, if available: notice of availability, obtaining a copy of the assessment, and susceptibility information.

3. Definitions for MCL, MCLG, and If Applicable TT, AL, Variances and Exemptions

4. Levels of Any Contaminants Detected

- For comparison must include the corresponding MCL, MCLG, TT, or AL.
- Likely source(s) of detected contaminants.
- Clear indication of any contaminant detected in violation of EPA standard as well as an explanation of the violation including the length, potential health effects, and actions take to remedy violation.

5. Information on *Cryptosporidium*, Radon, and Other Contaminants Which May Indicate a Health Concern

6. Additional Health Information

- Explanation of contaminants in drinking water, including bottled water.
- Explanation of the vulnerability of immuno-compromised populations (i.e. cancer patients, people with HIV/Aids or other immune system disorders) to drinking water contaminants.
- Educational statements for arsenic, nitrate, and lead when these contaminants are detected under conditions specified in the rule.
- Health effects language for TTHMs when detected above 80 ppb but below 100 ppb.

7. Information on National Primary Drinking Water Regulation (NPDWR) Violations

 Explanation of violation, any potential health effects, and steps the system has taken to correct the violation.

8. Information If System Is Operating under a Variance or Exemption

Explanation of variance or exemption; reasons for and dates of issue; and notice of public opportunity for public input in the review.

Attachment 1 (cont.)

Report Delivery and Recordkeeping Requirements for CWSs

1. CCR Delivery to Customers

 Each CWS must mail or otherwise directly deliver one copy of the CCR to each customer, unless granted a mailing waiver. (See number 7 below)

2. "Good Faith" Effort for Delivery to Non-Bill Paying Consumers

 CWS must make a "good faith" effort to reach those consumers who they serve but who do not get water bills, such as renters. "Good faith" efforts mean using a mix of several methods recommended by the State.

3. Delivery of CCR and Certification to Primacy Agency

CWS must mail to the State: (1) a copy of the CCR no later than the date the CWS is required to deliver the report to its customers; and (2) within 3 months of the required delivery date, mail certification to the State indicating that the CCR was distributed to customers with information that is correct and consistent with compliance monitoring data previously submitted.

4. CCR Delivery to Other Agencies

• CWS must deliver the CCR to any other agency identified by the State no later than the required date to send the CCR to its customers.

5. CCR Availability to the Public

▶ CWS must make CCRs available to the public upon request.

6. CCR Availability on the Internet

► CWS serving 100,000 or more persons must post CCR on a publicly accessible Internet site.

7. Mailing Waiver for CWSs Serving Fewer than 10,000 Persons

► The Governor of a State may waive the mailing requirement for CWSs serving fewer than 10,000 persons.

8. CWS Keeping CCR Copies on File

CWS must keep copies of their CCR on file for at least 5 years.

Additional Resources/Contact Information:

State Drinking Water Program
EPA Safe Drinking Water Hotline
EPA website
American Water Works Association/local affiliate

phone number/email address (800-426-4791)
http://www.epa.gov/safewater
phone number/website/email address

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Appendix C: CCR Certification - Example Formats

Under Section 141.155(c) of the CCR rule, within 3 months from the date the system is required to distribute the CCR to its customers, the CWS must send a letter of certification to the primacy agency certifying that the system has:

- Distributed the CCR to its customers, and
- Used in the report information that is correct and consistent with compliance monitoring data previously submitted to the primacy agency.

A system has the option of sending the certification at the same time the CCR is delivered to the primacy agency. This appendix provides an example format for a certification with the two required elements.

EPA recommends that States and EPA view the certification letters as another opportunity to explain how the system is informing customers about the quality of their drinking water and the steps the system has taken to protect the source of water. Therefore, States are encouraged to have systems provide additional information on how the CCR was distributed, especially "good faith" efforts to reach non-bill paying consumers. This appendix provides example formats for certifications with additional information on CCR distribution.

CCR Certification - Basic Example Format

CWS Name:			.					
CWS I.D. #:								
		Consumer Co			been d	istribute	d to custo	
Further	, the system	of availabilit n certifies the compliance m	at the info	rmation co	ntained	in the	eport is c	orrect and
						٠		
Certified by:	Name							
	Title		•	, ,			·····	
	701 //				TD /			-

CCR Certification - Example Format for Systems without Mailing Waivers

CWS Name:		
CWS I.D. #:		
appropr informa	iate notices o tion contained	onsumer Confidence Report has been distributed to customers (and f availability have been given). Further, the system certifies that the lin the report is correct and consistent with the compliance monitoring itted to the primacy agency.
System-specific	c details on Co	CR distribution to customers are outlined below: (check all that apply)
CCR w	as distributed	by mail or other direct delivery. Specify other direct delivery methods:
	2 1.1 22 00	
		vere used to reach non-bill paying consumers. Those efforts included the mended by the primacy agency:
	Posting the Co	CR on the Internet at:
	Mailing the C	CR to postal patrons within the service area. (attach zip codes used).
,	Advertising a	vailability of the CCR in news media (attach copy of announcement).
	Publication of	CCR in local newspaper (attach copy).
	Posting the Co	CR in public places (attach a list of locations).
		nultiple copies to single bill addresses serving several persons such as: es, and large private employers.
	Delivery to co	ommunity organizations (attach a list)
	CCR on a pub . List Interne	licly accessible Internet site for systems serving 100,000 or more t site address:
Deliver	ed CCR to oth	ner agencies as specified by the primacy agency (attach a list).
Other (i	if additional m	nethods used, attach description)
Certified by:	Name _	
	Title _	
	Phone #	Date

CCR Certification - Example Format for Systems with Mailing Waivers

CWS Name:	
CWS I.D. #:	TOTAL STREET,
I confirm that the Consumer Confidence Report happropriate notices of availability have been given) a consistent with the compliance monitoring data previous	and that the information is correct and
System-specific details on distribution of the CCR to custom of availability was provided as specified for:	ers are outlined below. CCR or notice
Systems Serving Fewer than 10,000 Persons	
Published the CCR in the local newspaper(s). Attack and dates below:	n a copy of the notice. List newspaper
Informed customers the CCR will not be mailed. List	st methods of notification below:
Developed procedures to make reports available upo	n request. Specify below:
Systems Serving Fewer than or Equal to 500 Persons List methods used to inform customers the CCR will	l not be mailed:
Developed procedures to make reports available upo	n request. Specify below:
Certified by: Name	
Title	Date

Appendix D: Governor's Mailing Waiver - Example Formats

Under section 141.155 (g) of the CCR rule, the requirement that CWSs mail the CCR to its customers can be waived. The following authorities can waive the mailing requirements for systems serving fewer than 10,000 persons:

- The Governor of a State or his/her designee.
- A Tribal leader if the Tribe has met the requirements under §142.72 for Tribal eligibility.
- The EPA Regional Administrator on some Indian lands where no Tribe has been deemed eligible.

Systems that have been granted a mailing waiver are still required to follow other CCR rule requirements including delivery of the report to the primacy agency and any other agency the primacy agency designates. Refer to Section I, Report Delivery and Recordkeeping Requirements, of the CCR implementation guidance for information on mailing waivers.

The following pages contain two example formats for mailing waivers for systems serving fewer than 10,000 persons with a special clause for systems serving fewer than 500 persons. States, in accordance with their laws, can also establish criteria for obtaining and renewing the waivers. For example, a State can choose whether the waiver should apply to all systems in a given category or be system-specific. The first example format is a blanket waiver for systems in a given category and the second a system-specific mailing waiver.

Governor's Mailing Waiver - State-Wide Example Format

of the State of water systems	ovided in Section 1414(c)(4)(C) of the Safe Drinking Water Act allows the Governor of(insert Tribal agency if applicable) to allow community a serving fewer than 10,000 persons not to mail or otherwise provide direct delivery of
the Consume	r Confidence Reports (CCRs) to each customer.
otherwise me	aity water systems listed in Attachment A serve fewer than 10,000 persons [and et all direct delivery waiver requirements - optional], a waiver is hereby granted [for ginning January 1 of the calendar year, and ending optional].
(1)	Inform customers it will not be providing copies of the CCR by mail or other direct delivery method.
(2)	Publish the report annually in one or more local newspapers serving areas in which the system's customers are located.
(3)	Make copies of the CCR available to the public upon request.
of the State of apply requires	vided in Section 1414(c)(4)(D) of the Safe Drinking Water Act allows the Governor of(insert Tribal agency if applicable) to determine not to ments 1 and 2 (listed above) to community water systems which serve 500 persons or system provides notice to its customers once a year that the CCR is available upon
meet all direct beginning January system must p	ity water systems listed in Attachment B serve 500 persons or fewer [and otherwise t delivery waiver requirements - optional], a waiver is hereby granted [for the period wary 1 of the calendar year, and ending optional]. Each water provide notice to customers of the availability of the report, at least once per year, by door delivery, or posting. Any other methods authorized by the primacy agency ed.
All systems w	rith mailing waivers are still required to:
•	Complete a CCR in accordance with all content requirements.
•	Provide a copy of the CCR to the primacy agency and any other agency specified by the primacy agency.
•	Make copies of the CCR available to the public upon request.
Governor's or	· His/Her Designee's Signature Date

Governor's Mailing Waiver - System-Specific Example Format

Authority provi of the State of water systems s the CCRs to each	ded in Section 1414(c)(4)(C) of the Safe Drinking Water Act allows the Governor (insert Tribal agency if applicable) to allow community erving fewer than 10,000 persons not to mail or otherwise provide direct delivery of ch customer.
meets all direct	water system,, serves fewer than 10,000 persons [and otherwise delivery waiver requirements - optional], a waiver is hereby granted [for the period nuary 1 of the calendar year, and ending optional]. The water
\ /	Inform customers it will not be providing copies of the CCR by mail or other direct delivery method.
	Publish the report annually in one or more local newspapers serving areas in which the system's customers are located.
(3)	Make copies of the CCR available to the public upon request.
of the State of apply requirem	ded in Section 1414(c)(4)(D) of the Safe Drinking Water Act allows the Governor (insert Tribal agency if applicable) to determine not to ents 1 and 2 (listed above) to community water systems which serve 500 persons or stem provides notice to its customers once a year that the CCR is available upon
granted [for the optional]. The	water system,, serves 500 persons or fewer [and otherwise delivery waiver requirements established by the State - optional], a waiver is hereby period commencing January 1 of the calendar year, and ending water system must provide notice to customers of the availability of the report, at year, by mail, door-to-door delivery, posting or any other means authorized by the
All systems wi	th mailing waivers are still required to:
•	Complete a CCR in accordance with all content requirements.
	Provide a copy of the CCR to the primacy agency and any other agency specified by the primacy agency.
•	Make copies of the CCR available to the public upon request
Governor's or	His/Her Designee's Signature Date

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Appendix E: Safe Drinking Water Information System (SDWIS) Reporting

This appendix provides detailed information on violation and compliance achieved definitions, and reporting requirements for each CCR violation type. In addition, this appendix contains examples on what to report, including how to report utilizing the appropriate Safe Drinking Water Information System/Federal version (SDWIS/FED) Data Transfer File Format (DTF).

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Background

This document contains the requirements for State reporting to EPA and the definitions of violations and returned to compliance under the Consumer Confidence Report (CCR) rule.

Section I. Federal Reporting Requirements

This section discusses the Federal reporting requirements under 40 CFR Section 142.16(f)(4) and reporting to the Safe Drinking Water Information System/Federal version (SDWIS/FED) of violations, follow-up and enforcement actions, and when compliance is achieved. Specific guidance is provided for entry of these data into SDWIS/FED. In addition, examples are provided for each reporting requirement. These reporting requirements apply only to community water systems (CWSs).

A. Violations

This section of the guidance provides violation and compliance achieved definitions, and reporting requirements for each violation type. Further, examples on what to report, including how to report utilizing the appropriate SDWIS/FED Data Transfer File (DTF) format, are provided after the discussion of each violation type.

Violation reporting will be based on the definitions in Section II, A: Violation Determination, of the CCR Implementation Guidance.

• CCR Report Violation - (major)

occurs when the CWS fails to produce and deliver the report to the public and provide a copy to the State by the annual due date as specified in the rule or, State determines the report was grossly inadequate and must be regenerated and delivered providing a copy to the State.

CCR Adequacy/Availability/Content Violation - (minor)

occurs when the State Primacy Agency determines the report is deficient in language, content, and/or meeting availability requirements as specified in the rule.

The requirements of the drinking water regulations result in violation conditions being reported to SDWIS/FED. The most common characteristics for violations are listed below:

- ► A unique PWS-ID (DTF element C101).
- ► A unique violation ID (DTF element C1101).

- A code identifying the contaminant or rule for which the violation applies (DTF element C1103).
- ▶ A code describing the type of violation (DTF element C1105).
- ▶ Date range associated with the compliance period (DTF elements C1107 and C1109).
- Number of months in the compliance (or monitoring) period (DTF element C1111).
- Analytical result for contaminant (DTF element C1123).
- Severity (major) violation indicator (DTF element C1131 primarily used for monitoring violations).

All CCR rule violations will have the same contaminant/rule code, 7000. As a result, SDWIS/FED will provide (default) the value of 7000 for data element C1103 (to allow for simple queries). Some States may choose to include a DTF transaction with this value to maintain consistency with their reporting of other violations from other rules. That will be acceptable as long as the value reported for C1103 is 7000 for violations of this rule.

Each violation is defined by a violation type code (DTF element C1105). Currently for this rule, there are 2 types of violations:

- 71 CCR Report Violation (major)
- 72 CCR Adequacy/Availability/Content Violation (minor)

Normally, violations must identify the time frame for which the PWS is in violation (i.e., out of compliance). In SDWIS/FED, this is characterized by the range of dates in which a specific action or set of actions was to have taken place (e.g., 10 samples were to be taken during a specific time period), treatment is to be monitored and results must be within certain levels for a specific period of time, etc.), and is defined, in SDWIS/FED, by these 3 data elements:

- Compliance period begin date (C1107)
- Compliance period end date (C1109)
- Compliance period in months (C1111)

For this rule, the requirement is to produce a report by a specific date. If that date is missed, a violation exists and the time frame will be represented by a **single date** rather than a date range and is reported as the compliance period begin date (DTF element C1107). The value to be reported is the due date of the report for violation type 71 (10/19/1999 for the first report, 07/01/2000 for the second, etc.) The value to be reported for violation type 72 is the date the State determines a violation exists. The compliance period end date (C1109) and compliance period in months (C1111) should not be reported.

The severity of the violation is embedded in the violation type code, therefore the major violation indicator (DTF element C1131) is not reported for CCR rule violations.

The following exhibits present the violation record data and the violation types for reporting CCR rule violations.

Exhibit 1 - SDWIS/FED DTF C1100 — Violation Record Data Elements			
Number	Description		
C101	PWS-ID		
C1101	Violation ID		
C1103 *	Contaminant/Rule Code		
C1105	Violation Type Code		
C1107	Compliance Period Begin Date		
	= the report due date for violation type 71(major)		
	= the date State determines a violation exists for violation type 72 (minor)		

^{*} C1103 will be defaulted by SDWIS/FED with 7000 for all violation types.

Exhibit 2 - SDWIS/FED CCR Rule Violation Type Codes		
Violation Type	Violation Code	
CCR Report	71	
CCR Adequacy/Availability/Content	72	

A.1. CCR Report Violation

A CCR Report Violation is defined as failure of the CWS to produce the CCR, deliver it to the public, and provide a copy of the report to the State by the appropriate deadline. The first CCR is due by October 19, 1999. It must contain data collected during, or prior to, calendar year 1998, which was used to determine compliance in calendar year 1998. The second CCR is due by July 1, 2000 and subsequent reports by July 1, annually thereafter. The system is to provide a copy of the first CCR to the State by October 19, 1999, the second by July 1, 2000, the third by July 1, 2001, etc. A violation must be reported to SDWIS/FED if the report is not produced and delivered by the appropriate deadline within 45 days after the quarter in which the violation occurred. If and when the CCR is subsequently delivered to the State, the State would report that the system has returned to compliance. Examples on how to report the violation and returned to compliance data are provided on the following pages.

Violation Code 71 — CCR Report Violation Examples

Example 1-

A system (AA1234567) does not produce and deliver a copy of the first CCR by October 19, 1999 to the State. By February 15, 2000, the State would report the following CCR Report Violation to SDWIS/FED.

C101	AA1234567	PWS-ID	
C1101	0000001	Violation ID	
C1103*	7000	Contaminant Code (Rule Code)	
C1105	71	Violation Type Code	
C1107	10/19/1999	Compliance Period Begin Date	
*Note: C1103 will be defaulted by SDWIS/FED to 7000 and thus, need not be entered by the State. C1109, C1111 and C1131 are not reported for this violation type.			

The DTF transactions for this record are:

Columns 1-2	Columns 3-11	Columns 12-18	Columns 19-25	Columns 26-31	Columns 32-71
D1	AA1234567	0000001		IC1105	71
D1	AA1234567	0000001		IC1107	10191999

The same system delivers the CCR to the State on December 15, 1999. The State would report that the system had returned to compliance as of the date the CCR was received. By February 15, 2000 (within 45 days after the quarter in which the system returned to compliance), the State would report the following information to SDWIS/FED via the DTF C1200-Enforcement Action Record:

C101	AA1234567	PWS-ID
C1201	0000003	Enforcement ID
C1203	12/15/1999	Enf-Action-Date
C1205	sox	Enf-Action-Code
CY5000	0000001	Enf-Link to Violation

The DTF transactions for this record are:

Columns 1-2	Columns 3-11	Columns 12-18	Columns 19-25	Columns 26-31	Columns 32-71
E1	AA1234567	0000003		IC1203	12151999
E1	AA1234567	0000003		IC1205	SOX
E1	AA1234567	000003		ICY500	0000001

Example 2 - (Major Adequacy Deficiencies)

A CWS (MM8877665) delivered its CCR to the State by the October 19, 1999 due date. On December 13, 1999, the State determined the CCR was so deficient that it required the system to correct and re-deliver the report. By February 15, 2000, the State would report a CCR Report Violation (not a CCR Adequacy/Availability/Content Violation). The system would revise and redistribute the CCR providing a copy to the State on May 10, 2000. By August 15, 2000 (45 days after the quarter in which the violation occurred), the State would report the returned to compliance information. The following examples display the violation and return to compliance reporting:

C101	MM8877665	PWS-ID	
C1101	0000005	Violation ID	
C1103*	7000	Contaminant Code (Rule Code)	
C1105	72	Violation Type Code	
C1107	10/19/1999	Compliance Period Begin Date	
*Note: C1103 will be defaulted by SDWIS/FED to 7000 and thus, need not be entered by the State.			

The DTF transactions for this record are:

Columns 1-2	Columns 3-11	Columns 12-18	Columns 19-25	Columns 26-31	Columns 32-71
D1	MM8877665	0000005		IC1105	71
D1	MM8877665	0000005		IC1107	10191999

Returned to Compliance Reporting:

C101	MM8877665	PWS-ID
C1201	0000105	Enforcement ID
C1203	05/10/2000	Enf-Action-Date
C1205	sox	Enf-Action-Code
CY5000	0000005	Enf-Link to Violation

The DTF transactions for this record are:

Columns 1-2	Columns 3-11	Columns 12-18	Columns 19-25	Columns 26-31	Columns 32-71
E1	MM8877665	0000105	5	IC1203	05102000
E1	MM8877665	0000105		IC1205	SOX
E1	MM8877665	0000105		ICY500	. 00000005

A.2. CCR Adequacy/Availability/Content Violation

The regulation specifies required language, content, and requirements to make reports available to the public for the CCR. The regulation also requires a CWS to provide a certification to the State within 3 months of the CCR due date that the report was distributed to customers and contained information that was correct and consistent with compliance monitoring data previously submitted to the State. (Refer to Section I, Report Delivery and Recordkeeping Requirements of the CCR Implementation Guidance for further information on the CCR certification). The State will determine compliance with these requirements and when found to be in violation (inadequate for any area or failure to provide the certification) the State must report a CCR Adequacy/Availability/Content Violation. This violation type is considered a minor violation and is defined as: meeting some, but not all, of the requirements. Within 45 days after the quarter in which the report is due or the State determines that a violation exists, the State would report the violation to SDWIS/FED. Because the focus will be on whether a system has prepared a CCR or not during the initial implementation of this rule, reporting of this violation is optional during the first 2 years (1999 and 2000). In 2001, reporting of this violation is required.

Corrective actions for minor deficiencies will be at the State's discretion. If corrective actions are required and taken by the system, the State may wish to report the return to compliance data. Return to compliance reporting is recommended for minor violations but not required. Examples on how to report the violation and returned to compliance data are provided:

Violation Code 72 — CCR Adequacy/Availability/Content Violation Examples

Example 1 - (Minor Deficiencies)

A system produces and delivers a copy of the third CCR by July 1, 2001. On September 8, 2001, upon review of the report, the State determines that the system failed to include the required source information. By February 15, 2001 (within 45 days after the end of the quarter in which the State determined a violation existed), the State would report the following CCR Adequacy/Availability/Content Violation information:

C101	XX1123456	PWS-ID	
C1101	02G0013	Violation ID	
C1103*	7000	Contaminant Code (Rule Code)	
C1105	72	Violation Type Code	
C1107	09/08/2001	Compliance Period Begin Date	
*Note: C1103 will be defaulted by SDWIS/FED to 7000 and thus, need not be entered by the State.			

The DTF transactions for this record are:

Columns 1-2	Columns 3-11	Columns 12-18	Columns 19-25	Columns 26-31	Columns 32-71
D1	BB1123456	02G0013		IC1105	72
D1	BB1123456	02G0013		IC1107	07012001

Because the CWS failed to produce an "adequate" report for the third year in a row, the State issued an Administrative Order against the system on October 10, 2001. Because the State does not maintain the violation-id or enforcement-id records in its data base it used the generation-id facility within SDWIS/FED. (See the SDWIS/FED Data Entry Instructions for more information on using SDWIS/FED generated-ids.) The State reports the enforcement action to SDWIS/FED under the Z5000 link method by providing the violation type (72), the contaminant code (7000), and the begin date (09/08/2001) as illustrated below. An example of reporting the generated-id for violations is displayed in the example above and below for enforcements:

C101	XX1123456	PWS-ID
C1201	02G00001	Enforcement ID
C1203	10/10/2001	Enf-Action-Date
C1205	SFL	Enf-Action-Code
CZ5000	72700009082001	Enf-Link to Violation

The DTF transactions for this record are:

Columns 1-2	Columns 3-11	Columns 12-18	Columns 19-25	Columns 26-31	Columns 32-71
E1	XX1123456	02G0001		IC1203	10102001
E1	XX1123456	02G0001		IC1205	SOX
E1	XX1123456	02G0001		ICZ500	072700009082001

The State may require the system to revise and re-submit the CCR or to take some other action to address the deficiency. The State should review the following year's CCR to insure that similar deficiencies are not repeated. The State is encouraged to report the return to compliance information as in Example 1 above but is not required to do so.

Example 2 -(Certification Violation)

A system (MM9988777) produces and delivers a copy of the first CCR to the State on September 12, 1999 (deadline is October 19, 1999). The State reviews and determines it is adequate in content. However, the system does not submit the required certification within 3 months of the CCR's required delivery date(due by January 19, 2000). By May 15, 2000 (within 45 days after the end of the quarter), the State must report the following CCR certification violation information:

C101	MM9988777	PWS-ID
C1101	0000080	Violation ID
C1103*	7000	Contaminant Code (Rule Code)
C1105	72	Violation Type Code
C1107	01/19/2000	Compliance Period Begin Date

The DTF transactions for this record are:

Columns 1-2	Columns 3-11			Columns 26-31	Columns 32-71		
D1	мм9988777	0000013		IC1105	72		
D1	MM9988777	0000013		IC1107	07012000		

If and when the system submits the certification, the State may wish to report the returned to compliance information as in previous examples.

Section II. Returned to Compliance and Enforcement Action Reporting

Reporting that a system has returned to compliance is required for CCR Report Violations (C1105 vio_type = 71). In addition, all formal enforcement actions taken against violations of this rule are required to be reported to SDWIS/FED. Both "returned to compliance" and formal enforcements must be linked to the specific violation(s) they address. While reporting returned to compliance information is not required for the **minor** CCR Adequacy/Availability/Content Violations (C1105 vio_type = 72), it is recommended. The following describes the two appropriate ways in which enforcement and follow-up actions, formal and informal (including returned to compliance), may be linked to CCR rule violations:

Associated Violation IDs (Y5000) - FY & VIOLATION ID NUMBER.

Entering the specific violation ID(s) to which the enforcement action is related will establish a link between the enforcement record and each violation record matching the specific violation ID. If no links are established (reported violation IDs not found/matched on the data base) the enforcement record will be rejected.

Associated Violation Contaminant Groups (Z5000) - TYPE, CONTAMINANT, COMPLIANCE PERIOD BEGIN DATE (MO, DAY & YR)

Entering the violation type code(s) (71 or 72), the contaminant code (7000) and the begin date of the compliance period begin date will establish a link between the enforcement action and all CCR violations which exactly match the enforcement link data. If no matches are found, the enforcement record will be rejected.

Only the Y5000 and Z5000 enforcement/violation linking methods are appropriate for the CCR rule violations. Examples of how to report these violation/enforcement link methods are provided in the violation section above. Exhibit 3 defines returned to compliance by violation type:

Exhibit 3 - Definition of Returned to Compliance by Violation Type							
CCR Report Violation	System subsequently produces and delivers the report to the public as required under §§141.153, 141.154, and §§141.155, and delivers a copy of the report to the State as required by §§ 141.155(c). An annual report must be produced						
Vio_type 71 for each year beginning with 1998.							
	The State may allow 2 years data be combined in one report when the violation has existed for more than 6 months to reduce delivery expenses, however the combined report must identify data specific to each year.						

Exhibit 3 - Definition of Returned to Compliance by Violation Type								
CCR Adequacy/ Availability/ Content Violation Vio_type 72		System provides additional/required delivery of the report as required under §§141.155, or System revises the report for adequacy of content as required under §§141.153 and 141.154 and provides delivery, etc.						
Note: The action(s) needed to achieve compliance are not meant to replace other activities that are required to be conducted under the rule for that time frame nor are they meant to indicate that a violation did not occur for the system. Instead, they indicate that this violation no longer continues. Should the system again fail to meet subsequent requirements of the rule, another violation must be reported.								

Section III. SDWIS/FED Reporting Time-Lines

Exhibit 4 - SDWIS/FED Reporting Time-lines										
	Category	First CCR	Second CCR	Subsequent CCRs						
Violati	ons	•								
CCR d	ue to State by	10/19/1999	07/01/2000	07/01/200X						
CCR R	eport Violation State must report violation within 45 days after the end of the quarter in which the violation occurs	02/15/2000	11/15/2000	11/15/200X						
CCR A	dequacy/Availability/Content Violation State must report violation within 45 days after the end of the quarter in which the violation is determined	02/15/2000	11/15/2000	11/15/200X						
·	Failure to send certification on time	05/15/2000	02/15/2001	02/15/200X						
Note:	Note: Certification to the State is required within 3 months after the due date of the CCR. Compliance determinations with the certification requirement can not be made until the 20 th day January 2000 month which falls into the next compliance (SDWIS/FED) reporting period. Most States allow a 5-10 day grace period to cover mail time. Violations are to be reported within 45 days after the end of the compliance period in which they were determined. Therefore, reporting of certification violations will take place in the 2 nd reporting period after the due date of the report.									

Section IV. Sources for Additional Information

Additional technical information on SDWIS/FED reporting information can be obtained by contacting Fran Haertel of the Information Management Branch, Implementation and Assistance Division, Office of Ground Water and Drinking Water at (214)-665-8090.

Appendix F: CCR Example/ Report Content Topics

40 CFR 141.153 and 141.154 specifies the content requirements for a CCR. Every CCR must contain the following eight items:

- ▶ Information about the water system.
- ► Information on source(s) of water.
- Definitions: Required MCL, MCLG;
 If applicable TT, AL, Variances and Exemptions.
- The levels of detected contaminants.
- Information on *Cryptosporidium*, radon and other contaminants.
- ► Required additional health information.
- Information on violations of National Primacy Drinking Water Regulations (NPDWR).
- Information if a system is operating under a variance or exemption.

An example of a generic CCR is provided on the following pages. This sample CCR illustrates how required information on the source(s) of water, the levels of any contaminants detected in the water, compliance with other drinking water rules, and educational material can be displayed in the report. Further information on the report content topics listed below is provided on the following pages.

Sample CCR F-3
Report Content Topics
General Information
Request for CCR Recipients to Share Information with Non-Bill Paying Consumers . F-8
Wholesalers/Retailers
Source(s) of Water F-8
Interconnections/Back-up Sources
Non-English Speaking Notice F-10

Reporting	the Level	s of Detec	ted Coa	ntamii	nants	• • •		• • •	• • •		• • •	• •		 . F-11
Interpreting	g Monito	ring Data									• • •			 . F-12
	o o o	running TTHM: lead an turbidit beta pa	s d coppe y		age					,				
Monitoring	g Waivers											• • •		 . F-16
MCLs					· • • •			• • •	•••			• • •	. 	 . F-17
Multiple H	ydraulica	lly Indepe	endent I	Distrib	oution	ı Sys	tem	s.				• • •		 . F-18
Cryptospor	ridium													 . F-18
Radon	• • • • • • •	• • • • • • • •												 . F-19
Other Cont	taminants											• • •		 . F-20
NPDWR V	iolations,		• • • • •									• • •		 . F-20
Variances :	and Ever	ntions												F-23

Town Water Quality Report - 1999

Este informe contiene información muy importante sobre su aqua beber. Tradúzcalo o hable con alguien que lo entienda bien. [translated: This report contains very important information about your drinking water. Translate it, or speak with someone who understands it well!]

Introduction

[OPTIONAL section] In compliance with the federal Safe Drinking Water Act Amendments, Town Water System is providing its customers with the first annual water quality report. This report explains where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and State standards. We are committed to providing you with information because informed customers are our best allies. For more information about your drinking water, please contact us at 867-5309.

Does My Drinking Water Meet EPA Standards?

[OPTIONAL section] Yes, our water meets all of EPA's standards. In 1998, we conducted more than 500 tests for over 80 contaminants that may be in drinking water. As you'll see in the table contained in this report, we detected 7 contaminants, and found only atrazine at a level higher than the State allows. As we told you in a letter at the time, our water was temporarily unsafe. For more information, see the discussion of the atrazine violation on the reverse.

What Is the Source of My Water?

[REQUIRED section: water system will explain this in its own words] Your water comes from three municipal wells drilled about 500 feet into an underground source of water called the Low Plains Aquifer. These wells are located west of town on the north side of City Park. The town owns the land immediately around these wells and restricts certain activities on that property. After the water comes out of the wells, we treat it to remove several contaminants and we add disinfectant to protect you against microbial contaminants. The State will be performing an assessment of our source water which will be completed by January of 2001. We will report the results to you and tell you how to get a copy of the report when it is available.

How Can I Get Involved?

[REQUIRED section: water system will write this] Our Water Board meets on the first Tuesday of each month at 7:30 pm in the Town Hall. Please feel free to participate in these meetings.

Do I Need to Take Special Precautions?

[REQUIRED section: Mandatory Language]

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA and the Centers for Disease Control and Prevention (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).

Why Are There Contaminants in My Water?

[REQUIRED section: Mandatory Language]

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).

[water system can use the EPA language provided below or write comparable language]

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.

Contaminants that may be present in source water before we treat it include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- 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.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, stormwater runoff, and residential uses.
- 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.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

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. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Is Our Water System Meeting Other Rules That Govern Our Operations?

[OPTIONAL section: water system will write this language] The State and EPA require us to test our water on a regular basis to ensure its safety. In February and May of this year, we took the samples at the required time but failed to submit the results of this monitoring to the State in a timely manner. We are reviewing our procedures to ensure that this paperwork will be submitted in a timely manner in the future.

Other Information

[OPTIONAL section: water system will write this language] Our water system is currently working with the community to increase awareness of proper waste disposal practices, to further protect the source of our drinking water. We are also working with other agencies and local watershed groups to educate the community on ways to keep the water safe.

Water Quality Data Table

[REQUIRED section: All reports must have a table for detected contaminants and an explanation of the definitions used in the table] The water quality data table on the next page lists all the contaminants that were detected during monitoring for the 1998 calendar year. The presence of these contaminants in the water, does not necessarily indicate that the water poses a health risk. Definitions of the terms and abbreviations used in the table are given below:

Definitions

- MCL: Maximum Contaminant Level, or 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
- MCLG: Maximum Contaminant Level Goal, or 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.
- AL: Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.
- ▶ n/a: Not applicable.
- nd: Not detectable at testing limit.
- ppb: Parts per billion or micrograms per liter.
- ▶ ppm: Parts per million or milligrams per liter.
- pCi/l: Picocuries per liter, a measure of radioactivity.

WATER QUALITY DATA

[THIS TABLE IS REQUIRED ON ALL REPORTS]

Unless otherwise noted, the data presented in the water quality data table is from testing done between January 1- December 31, 1998. The State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

Contaminant (units)	MCL	MCLG	Town Water Level Found	Range of Detections	Sample Date	Violation	Typical Source of Contaminant		
Inorganic Contan	ninants	! · · · · · · · · · · · · · · · · · · ·	<u> </u>		<u> </u>	J			
Fluoride (ppm) ¹	2	4	0.98	n/a		1	Water additive which promotes strong teeth.		
Lead (ppb)	AL=15	0	0.205	Out of 20 site only 1 site above the AL	es sampled, was found		Corrosion of household plumbing systems.		
Nitrate as nitrogen (ppm) ²	10	10	6	nd-9			Runoff from fertilizer use.		
Organic Contami	Organic Contaminants								
Atrazine (ppb) ³	3	3	4.275	0.1-10	•	*YES*	Runoff from herbicide used on row crops.		
Total Trihalomethanes (TTHMs) (ppb)	100	n/a	73	40-135			Byproduct of drinking water chlorination.		
Unregulated Cont	taminants								
Chloromethane (ppm)			0.07		May 1995		EPA and State regulations require us to monitor for this contaminant while EPA reconsiders its MCL.		
Radionuclides									
Beta/photon emitters (pCi/L) ⁴	50	0	10				Erosion of natural deposits.		

About the Data:

1. EPA's MCL and MCLG for Fluoride is 4 ppm. However, our State has set a lower MCL of 2 ppm to better protect human health.

2. About Nitrate:

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than 6 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 for advice from your health care provider.

3. Atrazine Violation:

During March, April, and May, a large surge in the use of atrazine-based herbicides by area farmers caused our water to exceed the MCL for atrazine. We sent a notice warning you of this problem when it occurred. We are working with the State and local farmers to ensure that this does not happen again, and we are monitoring atrazine levels monthly. We regret exposing you to any potential risk. You should know that 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. If you want more information about atrazine or the violation, please call us at 867-5309, or Sample County's Health Department (423-4444), or the State drinking water office (853-323-3333).

4. The MCL for beta particles is 4 mrem/year. EPA considers 50 pCi/l to be the level of concern for beta particles.

Appendix F: Report Content Topics

General Information

- The CCR rule does not specify a title for the report. A CWS may call the report a "consumer confidence report," a "water quality report," or use another title altogether.
- The provisions in the rule set the baseline for the reports. EPA encourages all systems to enhance or adjust the content of their reports to suit local conditions. If systems think that an added picture or graph would help customers understand the information systems are providing, then EPA encourages the addition of the information. Remember that any additional information must be consistent with, and not detract from, the purpose of the report.
- Customers are most interested in a clear statement of whether or not their drinking water system meets all relevant EPA and State standards. Although it is not mandated by the CCR regulations, EPA believes that one of the most useful things systems can do is to begin the report by explaining the steps taken to protect the drinking water and telling customers whether the water complied with all drinking water standards.

Systems should be cautious about making unqualified assertions about the safety of its water. Blanket statements such as "your tap water is safe" may be true for many people drinking the water, but not for members of vulnerable populations such as infants, people undergoing chemotherapy, or people with HIV/AIDS. Therefore, EPA suggests that systems be cautious in using the word "safe" and make sure that the required warning statements for vulnerable populations are clearly highlighted in the report.

Example of such a statement:

Last year, as in years past, your tap water met all EPA and State drinking water standards. Town Water System vigilantly safeguards its mountain water supplies and once again we are able to report that the department has never had a violation of a contaminant level or of any other water quality standard. This brochure is a snapshot of the quality of the water we provided last year. Included are details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. We are committed to providing you with this information because informed customers are our best allies.

Request for CCR Recipients to Share Information with Non-Bill Paying Consumers

• As part of a "good faith" effort, EPA recommends that a note be included in the CCR, or with the CCR as it is distributed, asking recipients to share information with non-bill paying consumers. A sample note may read as follows:

Town Water System has included additional copies of our Consumer Confidence Report in this mailing. Town Water System would appreciate it if large volume water customers such as yourself post extra copies of these reports in conspicuous locations or distribute them to your tenants, residents, patients, students, and/or employees. This action will allow individuals who consume the water Town Water System delivers, but are not billed as customers, to learn about our water system.

Wholesalers/Retailers

- Drinking water wholesalers must provide retailers with monitoring and other information in enough time so that a retailer can produce a CCR (See discussion in implementation guidance Section I, A: Key Dates of the Rule).
- Wholesalers are not responsible for creating the report for the retailer, nor are they responsible for providing data on contaminants the retailer monitors.
- In some cases, a retailer will contract with the wholesaler to produce the report, since the wholesaler may have more staff and resources available. Under those circumstances it would be acceptable for:
 - 1. The retailer to send out the wholesaler's CCR with a cover letter explaining their relationship, if the retailer had no new data to add.
 - 2. The retailer to reprint the wholesaler's CCR with a new title/letterhead and any additional data the retailer had.
- Retailers are responsible for ensuring that their customers receive a CCR containing all the required content elements, regardless of who prepares the report.

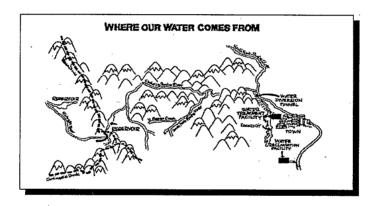
Source(s) of Water

- Describe:
 - The type of water (ground water, surface water, or a blend).
 - The commonly-used name(s) (if such a name exists).
 - Locations of your water source(s).

• If a source water assessment has been completed, information on the availability of the assessment and means to obtain a copy must be included in the CCR. Also, a brief summary of the source water's susceptibility to contamination based on the findings of the source water assessment should be included.

Example: Surface water source; source water assessment not available

Your water comes from the Grubstake and Spitfire rivers in the mountains west of town. We collect water in the McErtel Reservoir (Please see the map) and then pipe it to the treatment plant just northwest of town. Access to the reservoir is restricted to protect our water from contamination. We are working with the State drinking water program to identify what other kinds of pollution our water supply could be vulnerable to. The State will be performing an assessment of our source water which will be completed by 2001. We will report the results to you and tell you how to get a copy of the report when it is available.



Example: Surface water source; source water assessment available

Your water comes from the Grubstake and Spitfire Rivers. We collect it in the McErtel Reservoir and then pipe it to the treatment plant just northwest of town. The State drinking water program has found that our drinking water is potentially most susceptible to farm runoff and three underground storage tanks in Spitfire county. However, we have not detected any contaminants from these sources in our drinking water. You can get a copy of the source water assessment by contacting us at 867-5309.

• Appendix I contains more information on source water assessments and how this information can be incorporated into the CCR.

Interconnections/Back-up Sources

Explaining a system's interconnections and back-up sources may be difficult, but it is important to remember that consumers need to understand that the source of their water may vary during the year. If a system uses water from these sources, it should include the monitoring data in the table of detection data. Like many pieces of information in the report, deciding whether to explain that the well a system uses only a few days a year is a judgement call a system should make in consultation with the State.

Non-English Speaking Notice

- CWSs that have a large proportion of non-English speaking customers, as determined by the primacy agency, must include information in the appropriate language(s) regarding:
 - The importance of the report; or
 - 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.
- The primacy agency may allow CWSs, after consultation with the agency, to determine whether they serve communities with a large proportion of non-English speaking residents.
- Often, schools and universities have teachers or students who can provide low-cost translations. A sample statement is given below with the corresponding translations.

This report contains very important information about your drinking water. Translate it, or speak with someone who understands it well.

Spanish version: Este informe contiene información muy importante sobre su aqua beber.

Tradúzcalo o hable con alguien que lo entienda bien.

French version: Ce rapport contient des informations importantes sur votre eau potable.

Traduisez-le ou parlez en avec quequ'un qui le comprend bien.

Chinese version: 這份報告念有非常重要有関係喝的此 的资料、清找性得這份報告的人翻譯 或解釋绘為熱。

Korean version:

아래의 보고는 귀하께서 드시는 식수에 대한 중요한 정보가 포함되어 있습니다. 번역을 하시는게 아니면 이 보고를 잃고 이러하시는 분나 말는하시기를 바랍니다.

Reporting the Levels of Detected Contaminants

- A detected contaminant is any contaminant detected at or above its minimum detection limit. Appendix G contains a list of EPA's minimum detection limits for the following contaminants specified in the rule:
 - 40 CFR 141.23(a)(4) for inorganic contaminants.
 - 40 CFR 141.24(f)(7) for organic contaminants listed in 40 CFR 141.61(a).
 - 40 CFR 141.24(h)(18) for organic contaminants listed in 40 CFR 141.61(c).
 - 40 CFR 141.25(c) for radionuclides.
- To ensure that members of the public can easily compare detected contaminant levels with their corresponding MCLs, the table(s) must display:
 - The MCL in units that express it as a number ≥ 1 .
 - The MCLG and the detected contaminant level in the same units as the MCL.

Note: These values do not have to be expressed as a number ≥ 1 . Appendix H of this guidance shows how to convert MCLs and monitoring data for the CCR.

- The main table must contain **only** data for regulated contaminants (i.e contaminants subject to a MCL, TT, or AL), and unregulated contaminants for which EPA or the State requires monitoring under 40 CFR 141.40 or the Information Collection Rule (ICR), 40 CFR 141.142-143.
- Contaminants that are not detected or are detected below the minimum detection level should not be included in the detected contaminants table. If a system wishes to highlight the fact that it tests for, and does not find a number of other contaminants, EPA recommends placing this information outside of the table. For example a footnote to the table may read as follows:

EPA requires monitoring of over 80 drinking water contaminants. Those contaminants listed in the table above are the only contaminants detected in your drinking water.

- A system has the option of making several tables, so that the regulated contaminants are separate from those that do not have MCLs, like the ICR contaminants. Further, a system may wish to organize the table(s) by contaminant type (e.g., microbial, inorganic) or sampling site (e.g., treatment plant, distribution system).
- No data older than five years need be included in the first or subsequent reports.
- Only the results of ICR finished water monitoring should be included in the table. Those results should only be reported for 5 years from the date of the last sample or until the detected contaminant becomes regulated and subject to regular monitoring requirements, whichever comes first.
- Any additional, <u>voluntarily-collected</u> monitoring data which a CWS chooses to include in the CCR must be reported in another section of the report, clearly separated from the regulated contaminant data.

Interpreting Monitoring Data

Below are examples of how systems determine the highest compliance value and the range of detected levels to present for contaminants under the following monitoring scenarios:

1). Compliance with the MCL is determined annually or less frequently.

★ 1 sampling site/1 sampling date.

March 1998 - 0.003

REPORT IN TABLE: Highest Detected Level = 0.003. Report no range

★ Multiple sampling sites/1 sampling date.

Barium	Feb 1998
well #1	0.60
well #2	0.46
well #3	nd
REPORT IN TABLE: Highest Level =	÷0.60. AND Range = nd - 0.60

2). Compliance with MCL determined by a running annual average of all samples taken from a sampling point.

★ 1 sampling site/multiple sampling dates.

Atrazine	1 st quarter 1998	2 nd quarter 1998	3 rd quarter 1998	4 th quarter 1998
well #1	0.8	3.8	2.1	0.9

REPORT IN TABLE: Average = 1.9 AND Range = 0.8 - 3.8

3). Compliance with MCL determined by a running annual average of all samples at all sampling points – TTHMs example.

★ Multiple sampling sites/multiple sampling dates.

T				**************************************			
TTHMs	2 nd quarter 1997	3 rd quarter 1997	4 th quarter 1997	1 st quarter 1998	2 nd quarter 1998	3 rd quarter 1998	4 th quarter 1998
site #1	-	-	-	45	60	125	70
site #2	-	_	-	40	55	115	60
site #3	-	-	-	45	60	105	70
site #4	-	-	· -	50	65	135	80
Quarterly Average	55	125	65	45	60	120	70
Running Annual Average	-	-	-	73	74	73	74

REPORT IN TABLE: Highest Annual Average = 74 AND Range = 40 -135

Note: The last 3 quarters of 1997 are shown because they are needed to compute the running annual average. The reported range would include only detection data from 1998, unless one of the values from the previous year was so extraordinary that consumers would need it to understand the reported annual average.

As discussed in Section I, B.1: Item 6 of the implementation guidance, if any of the above values for the running annual average were above 80 (the revised MCL for TTHMs, effective in 2001) the report would need to include health effects language for TTHMs, even though the system was not actually in violation yet.

4). Lead and Copper

★ If a system detects either lead or copper, the CCR must include the 90th percentile value from the most recent sampling <u>and</u> the number of sampling sites exceeding the action level.

	site									
	1	2	3	4	5	6	7	8	9	10
July 1998	nd	nd	8	12	19	3	nd	nd	4	22

REPORT IN TABLE: 90th percentile = 19 AND Number of Sites above AL (15) = 2

Parametric data a system collects in association with this rule should not be included in the report.

★ Educational Statement for Lead

If lead is detected above the action level in more than 5 percent, and up to and including 10 percent of homes sampled, the following statement about the impact of lead on children must be included in the CCR:

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).

If lead is detected under the circumstances described above

- Systems that take **20 or more** samples must include the educational statement.
- Systems that collect **fewer than 20** samples do not have to include the educational statement.

★ Health Effects Language for Lead and Copper

Explanations of action level exceedances or violations of Subpart I [40 CFR 141.80 - 141.84] must include potential health effects language from Appendix C to Subpart O of the regulation. A copy of that appendix is provided in Appendix H of this guidance.

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 disabilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

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.

5). Turbidity

★ When reporting data pursuant to 40 CFR 141.73 - turbidity as a TT/indicator of filtration performance, the highest single measurement and the lowest monthly percentage of samples meeting the requirements specified for the relevant filtration technology must be included in the report. A system may wish to present the data as follows:

Contaminant	MCL	MCLG	Level Found	Range of Detections	Violation	Date of Sample	Typical Source of Contaminant
Turbidity	TT = 5 NTU	n/a	1	-	no		Soil runoff
enace on the second	TT=percentage of samples <0.5 NTU	11/a	96%	-	110	-	Soil runoff

As discussed in Section I, B.1: Item 4 of the implementation guidance, reporting turbidity based upon the revised requirements in 40 CFR 141.173 is not required until the CCR due in 2003.

As part of an explanation for measuring turbidity, systems may wish explain that turbidity is a measure of treatment performance and is regulated as a treatment technique.

6). Beta Particles

★ The MCL for beta particles is 4 mrem/year. EPA recognizes that labs often report these results in pCi/l, and that there is no simple conversion between the two units. Therefore, it is acceptable for systems to report the detected level for beta particles in pCi/l. So that consumers may have a standard against which to compare the detected level, systems should place 50 in the MCL column and include a footnote explaining that EPA considers 50 pCi/l to be a level of concern for beta particles.

Contaminant	MCL	MCLG	Level Found	Range of Detections	Violation	Date of Sample	Typical Source of Contaminant
Beta particles (pCi/l)	50*	0	10	nd-10			Decay of natural and man-made deposits

Note: The MCL for beta particles is 4 mrem/year. EPA considers 50 pCi/l to be the level of concern for beta particles.

Systems that detect beta particles at or above 50 pCi/l must determine the actual radioactive constituents present in the water to calculate the dose exposure level in mrem/yr, and must report both the detected level and the MCL as mrem/yr.

Monitoring Waivers

- Systems that have monitoring waivers, or for another reason monitor less often than once per year, must include information on contaminants detected in the most recent testing period. The report must also contain a brief explanation that the data for those contaminants is from the most recent testing done.
- If sampling was not performed for a given parameter in the calendar year covered by the report, then data going back a maximum of five years must be used.

As shown in the CCR example, for ease of presentation a column for the date of the last sample can be included in the table with the corresponding explanation outside of the table.

Contaminant	MCL	MCLG	Level Found	Range of Detections	Violation	Date of Sample	Typical Source of Contaminant
Cyanide (ppb)	200	200	10			Feb '97	Discharge from steel/metal industry; discharge from fertilizer and plastic factories
Selenium (ppb)	50	50	1			Feb '97	Discharge from petroleum and metal refineries

Most of the data presented in this table is from testing done between January 1 - December 31 1998. We monitor for some contaminants less than once per year, because the concentrations for those contaminants are not expected to vary significantly from year to year. As a result, some of our data though representative is more than a year old. For those contaminants, the date of the last sample is shown in the table.

MCLs

- The table(s) must contain the MCL for detected contaminants expressed as a number equal to or greater than 1.
- For any contaminant detected in violation of an MCL, a TT, or exceeding an action level, the table(s) must contain a clear indication of the violation or exceedance.

Generally, the State and federal MCLs are the same for most contaminants. In cases where a State MCL may be more stringent than the Federal standard, EPA recommends that the system indicate this in the report. Several ways to accomplish this include:

- Including the MCL in the table and highlighting the MCL through a different font or asterisk and explaining in a footnote that the State MCL is stricter than the federal standard. (as shown in the sample CCR).
- Placing both a federal and State MCL column in the table.

Contaminant	Federal :	Standard	2 1		Range of	Violation	Date of	Typical
	MCL	MCLG	MCL	Found	nd Detections		Sample	Source of Contaminant
Barium (ppb)	2	2	1	1	0.03-1	·		Discharge from drilling wastes and metal refineries

A system may also wish to highlight the case where there is no federal standard and the State has developed its own standard, using similar techniques.

Multiple Hydraulically Independent Distribution Systems

- If the system distributes water to its customers from multiple hydraulically independent distribution systems fed from *different* raw water sources, include in the table(s), separate columns for detection data for each service area. Also include a description of the area served by each distribution system.
- If a system's water is blended, co-mingled, or otherwise combined in any way within the distribution system, regardless of the number of sources or treatment plants, there is no need for them to have multiple columns of contaminant data. CWS must have more than one column in their CCR only if they put the water into **physically distinct distribution systems**. Under this rule, CWS are required to provide ranges of contaminant detection to account for water from different sources and of different quality.

Cryptosporidium

- If the system has performed monitoring indicating the presence of *Cryptosporidium* in its source water or its finished water, the CCR must contain a summary of the monitoring results and an explanation of the significance of those results. CWS may choose to include the actual analytical results as part of the summary.
- Information on *Cryptosporidium* **should not be placed** in the detected contaminants table. Rather, the information should be placed outside of the table, elsewhere in the report. A sample monitoring results summary may read as follows:

We are required to test our sources of drinking water, as well as our treated tap water, for the presence of Cryptosporidium We test for this contaminant quarterly in both source water and treated water. Although small amounts were found in the source water, we did not find any in the treated water that goes to your tap. Cryptosporidium is a microbial parasite which is found in surface water throughout the U.S. Although Cryptosporidium can be removed by filtration, the most commonly used filtration methods cannot guarantee 100 percent removal. Our monitoring of source water and/or finished water indicates the presence of these organisms. Unfortunately, current test methods do not enable us to determine if the organisms are dead or if they are capable of causing disease. Symptoms of an infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals are able to overcome the disease within a few weeks. However, immuno-compromised people have more difficulty and are at greater risk of developing severe, life-threatening illness. Immunocompromised individuals are encouraged to consult their doctor regarding appropriate precautions to take to prevent infection. Cryptosporidium must be ingested for it to cause disease, and it may be spread through means other than drinking water.

A system does have the option as to whether they wish to report analytical results as part of this summary.

• If the system monitored for *Cryptosporidium* and did not detect it, the system does not have to discuss the monitoring results in the CCR. However, a system does have the option to mention that *Cryptosporidium* was tested for and not detected. A sample statement could read as follows:

We are required to test our sources of drinking water, as well as our treated tap water, for the presence of Cryptosporidium. Cryptosporidium is a microbial parasite which is found in surface water throughout the U.S. When ingested, Cryptosporidium can cause gastrointestinal distress for otherwise healthy people and more serious illness or death for people with weak immune systems. We did not find any Cryptosporidium in our source (untreated) water or finished (treated) water. Therefore, we don't believe that you need to worry about these results. We have a modern and effective filtration plant, and filtration is the single best protection against Cryptosporidium.

Radon

• If the system has performed monitoring indicating the presence of radon in its finished water, the CCR must contain the monitoring results and an explanation of the significance of those results.

Radon is a radioactive gas that you cannot see, taste, or smell. It is throughout the United States and can move up through the ground and into a home through cracks and holes in the foundation. Radon can build up to high levels in all types of homes. Radon can also get into indoor air when released from tap water from showering, washing dishes, and other household activities. Compared to radon entering the home through soil, radon entering the home through tap water will in most cases be a small source of radon in indoor air. Radon is a known human carcinogen. Breathing air containing radon can lead to lung cancer. Drinking water containing radon may also cause increased risk of stomach cancer. If you are concerned about radon in your home, test the air in your home. Testing is inexpensive and easy. Fix your home if the level of radon in your air is 4 picocuries per liter of air (pCi/l) or higher. There are simple ways to fix a radon problem that aren't too costly. For additional information, call your State radon program or call EPA's Radon Hotline (800-SOS-RADON).

• If the system monitored for radon and did not detect it, the system does not have to present or discuss the monitoring results in the CCR.

Other Contaminants

- If the system has performed any additional voluntary monitoring that indicates the presence of other non-regulated contaminants in the finished water, EPA **strongly** recommends but does not require the system to report any results that might indicate a health concern. EPA considers any detects above a proposed MCL or health advisory level to indicate possible health concerns. The Safe Drinking Water Hotline (800-426-4791) and the EPA website http://www.epa.gov/safewater/hfacts.html are resources for this information.
- If a system chooses to include this information on these non-regulated contaminants, the report should include the results of monitoring, and an explanation of the significance of the results noting the existence of a human health advisory or proposed regulation.

NPDWR Violations

The CCR must include a clear and readily understandable explanation of any NPDWR violation during the reporting period, as well as any potential adverse health effects and the steps the CWS has taken to correct the violation.

Potential Health Effects Language

Lead:

Of the seven NPDWR violations identified in the rule, EPA is prescribing mandatory health effects language for only three violations:

1). Filtration and disinfection prescribed by Subpart H.

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.

2). Lead and copper control requirements.

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 disabilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

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.

3). Treatment techniques for acrylamide and epichlorohydrin.

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.

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.

For the remaining violations, a system may use language from Appendix C to Subpart O of the regulation, or design language that is tailored to that specific violation.

Monitoring and Reporting (M&R) Violations

Some contaminants are monitored for daily, others need to be checked far less frequently (every nine years is the longest monitoring cycle). For instance, at a minimum, drinking water systems will monitor every four hours for turbidity, monthly for bacteria, and once every four years for radionuclides. A M&R violation means that the system did not perform the required testing, take adequate samples, or report a violation as required. Most of the violations experienced by CWSs are for failure to monitor the drinking water and report the results.

As shown in the CCR example, a column for violations can be placed in the detected contaminants table and further explanation of the violation presented outside of the table. EPA recommends that M&R violations be described outside of the detected contaminants table. In that explanation the system can indicate that while monitoring and reporting violations do not necessarily indicate a health risk, if a system fails to monitor it may not be aware of the potential health risk posed by a contaminant which may be present, but undetected.

If a system has multiple monitoring violations, it may be simpler and shorter to list them in a separate table followed by a short explanation. The table could include columns for monitoring periods, number of samples required during the period, number of samples actually taken and whether samples were taken during the following monitoring period. However, all monitoring violations are not the same and in some instances, the CWS may believe it is more appropriate to describe each violation in a short paragraph. For example, a coliform violation in which one of 100 samples was missed is less serious than missing one of two required samples.

Multiple monitoring violations listed in a table:

We failed to complete required sampling in a timely manner. Because we did not take the required number of samples, we did not know whether the contaminants were present in your drinking water, and we are unable to tell you whether you health was at risk during that time. The contaminants for which monitoring was not done are listed in the table below, with the period during which samples should have been taken, the number of samples each contaminant required, the number taken, and when required sampling will resume.

Contaminant	Monitoring Period	Number of Samples Required	Number of Samples Taken	Date Sampling Will Resume
VOCs ¹	1/96-12/98	1	0	2/99
Total Coliform Bacteria	10/1/98-10/31/98	100	93	11/98

VOCs also known as organic compounds, are tested by collecting one sample and testing that sample for all VOCs. VOCs include benzene, carbon tetrachloride, chlorobenzene, 1,2-dichlorobenzene, 1,4-dichlorobenzene, 1,2-dichloroethane, cis-dichloroethylene, trans-dichloroethylene, dichloromethane, 1,2-dichloropropane, ethylbenzene, styrene, tetrachloroethylene, 1,1,1-trichloroethane, trichloroethylene, toluene, 1,2,4-trichlorobenzene, 1,1-dichloroethylene, 1,1,2-trichloroethane, vinyl chloride, and xylene.

Although monitoring may be done by group as opposed to each contaminant, each contaminant should be listed for not monitoring because each is a violation. For the example above, a footnote was added to list all of the VOC's.

Regardless of whether the violation information is presented in tabular or paragraph form or a combination thereof, an explanation of the potential health effects and steps to correct the violation must also be included. If a system failed to take the sample on time, the report should say "health effects unknown." If the system took the samples accurately and on-time, but mailed the results late, the system does not need to discuss health effects.

Recordkeeping of Compliance Data

Sample statement may read as follows:

Due to administrative oversight during a busy part of the year, our office failed to submit a report required under NPDWR. This violation has no impact on the quality of the water our customers received and it posed no risk to public health. We have established a report tracking file to ensure that all reporting requirements are met in the future.

Special Monitoring

Sample statement may read as follows:

Last year the State issued an order requiring our system to monitor for contaminant X four times per year instead of annually. We missed the first quarterly monitoring and reporting date, but since then we have been in compliance. We do not believe that the missed testing and reporting has any adverse effect upon public health. Our system will strive to meet all future requirements.

Variances and Exemptions

• If a system is operating under a variance or exemption during the period covered by the report, the CCR must include a section that explains the reasons why the variance or exemption was granted, the dates issued, renewal date, steps the system is taking to comply with the terms and schedules for the variance or exemption and a notice of public opportunity to review the variance or exemption.

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Appendix G: List of EPA's Minimum Detection Limits

Under the CCR rule, a detected contaminant is any contaminant detected at or above the detection limits prescribed by:

- ▶ 40 CFR 141.23(a)(4) for inorganic contaminants.
- ▶ 40 CFR 141.24(f)(7) for organic contaminants listed in 40 CFR 141.61(a).
- ▶ 40 CFR 141.24(h)(18) for organic contaminants listed in 40 CFR 141.61(c).
- ► 40 CFR 141.25(c) for radionuclides.

In an effort to make this guidance document as useful as possible, the EPA's minimum detection limits (MDLs) for all of the contaminants specified above are presented here. Most Primacy States have their own regulations specifying MDLs for these contaminants which may be more stringent and take precedence over EPA values.

The detection levels for some contaminants, such as lead and copper, and many of the disinfection byproducts are not included in the CFR sections cited above and are thus not included in the detection limits table on the following page. If a contaminant is not listed in the detection limits table and a system's laboratory analysis provides a detected value for that contaminant, the system must report the contaminant in the CCR. Contaminants that are not detected, or are detected below the MDL should not be included in the CCR detected contaminants table.

Та	ble G-1: El	PA's Minimum Detection Limits						
Contaminant	MCL (mg/l)	Methodology	Detection Limit (mg/l)					
Inorganic Contaminants [40 CFR 141.23(a)(4)]	Inorganic Contaminants [40 CFR 141.23(a)(4)]							
Antimony	0.006	Atomic Absorption; Furnace Atomic Absorption; Platform ICP-Mass Spectrometry Hydride-Atomic Absorption	0.0003 0.0008 ⁵ 0.0004 0.001					
Asbestos	7 MFL ¹	Transmission Electron Microscopy	0.01 MFL ¹					
Barium	2	Atomic Absorption; furnace technique Atomic Absorption; direct aspiration Inductively Coupled Plasma	0.002 0.1 0.002 (0.001)					
Beryllium	0.004	Atomic Absorption; Furnace Atomic Absorption; Platform Inductively Coupled Plasma ² ICP-Mass Spectrometry	0.0002 0.00002 ⁵ 0.0003 0.0003					
Cadmium	0.005	Atomic Absorption ; furnace technique Inductively Coupled Plasma	0.0001 0.001					
Chromium	0.1	Atomic Absorption; furnace technique Inductively Coupled Plasma	0.001 0.007 (0.001)					
Cyanide	0.2	Distillation, Spectrophotometric Distillation, Automated, Spectrophotometric Distillation, Selective Electrode Distillation, Amenable, Spectrophotometric	0.02 0.005 0.05 0.02					
Mercury	0.002	Manual Cold Vapor Technique Automated Cold Vapor Technique	0.0002 0.0002					
Nickel	0.1	Atomic Absorption; Furnace Atomic Absorption; Platform Inductively Coupled Plasma ² ICP-Mass Spectrometry	0.001 0.0006 ⁵ 0.005 0.0005					
Nitrate	10	Manual Cadmium Reduction Automated Hydrazine Reduction Automated Cadmium Reduction Ion Selective Electrode Ion Chromatography	0.01 0.01 0.05 1 0.01					
Nitrite	1	Spectrophotometric Automated Cadmium Reduction Manual Cadmium Reduction Ion Chromatography	0.01 0.05 0.01 0.004					
Selenium	0.05	Atomic Absorption; furnace Atomic Absorption; gaseous hydride	0.002 0.002					

Tak	ole G-1: EP	A's Minimum Detection Limits	
Contaminant	MCL (mg/l)	Methodology	Detection Limit (mg/l)
Thallium	0.002	Atomic Absorption; Furnace Atomic Absorption; Platform ICP-Mass Spectrometry	0.001 0.0007 ⁵ 0.0003
Organic Contaminants [40 CFR 141.24(f)(7)]	ī		
Vinyl chloride	0.002	502.2; 524.2	0.0005
Benzene	0.005	502.2; 524.2	0.0005
Carbon tetrachloride	0.005	502.2; 524.2; 551	0.0005
1,2-Dichloroethane	0.005	502.0; 524.2	0.0005
Trichloroethylene	0.005	502.2; 524.2; 551	0.0005
para-Dichlorobenzene	0.075	502.0; 524.2	0.0005
1,1-Dichloroethylene	0.007	502.2; 524.2	0.0005
1,1,1-Trichloroethane	0.2	502.2; 524.2	0.0005
cis-1,2-Dichloroethylene	0.07	502.2; 524.2	0.0005
1,2-Dichloropropane	0.005	502.2; 524.2	0.0005
Ethylbenzene	0.7	502.2; 524.2	0.0005
Monochlorobenzene	0.1	502.2; 524.2	0.0005
o-Dichlorobenzene	0.6	502.2; 524.2	0.0005
Styrene	0.1	502.2; 524.2	0.0005
Tetrachloroethylene	0.005	502.2; 524.2; 551	0.0005
Toluene	1	502.2; 524.2	0.0005
trans-1,2-Dichloroethylene	0.1	502.2; 524.2	0.0005
Xylenes (total)	10	502.2; 524.2	0.0005
Dichloromethane	0.005	502.2; 524.2	0.0005
1,2,4-Trichlorobenzene	0.07	502.2; 524.2	0.0005
1,1,2-Trichloroethane	0.005	502.2; 524.2	0.0005
Synthetic Organic Conta [40 CFR141.24 (h)(18)]	aminants in	cluding Pesticides and Herbicides	
Alachlor	0.002	505 ⁷ ; 507; 525.2; 508.1	0.0002
Aldicarb	0.003	531.1; 6610	0.0005

Table G-1: EPA's Minimum Detection Limits					
Contaminant	MCL (mg/l)	Methodology	Detection Limit (mg/l)		
Aldicarb sulfoxide	0.004	531.1; 6610	0.0005		
Aldicarb sulfone	0.002	531.1; 6610	0.0008		
Atrazine	0.003	505 ⁷ ; 507; 525.2; 508.1	0.0001		
Benzo(a)pyrene	0.0002	525.2; 550; 550.1	0.00002		
Carbofuran	0.04	531.1; 6610	0.0009		
Chlordane	0.002	505; 508; 525.2; 508.1	0.0002		
Dalapon	0.2	552.1; 515.1	0.001		
1,2-Dibromo-3- chloropropane (DBCP)	0.0002	504.1; 551	0.00002		
Di(2-ethylhexyl)adipate	0.4	506; 525.2	0.0006		
Di(2-ethylhexyl) phthalate	0.006	506; 525.2	0.0006		
Dinoseb	0.007	515.2; 555; 515.1	0.0002		
Diquat	0.02	549.1	0.0004		
2,4-D	0.07	515.2; 555; 515.1	0.0001		
Endothall	0.1	548.1	0.009		
Endrin	0.002	505; 508; 525.2; 508.1	0.00001		
Ethylene dibromide	0.00005	504.1; 551	0.00001		
Glyphosate	0.7	547; 6651	0.006		
Heptachlor	0.0004	505; 508; 525.2; 508.1	0.00004		
Heptachlor epoxide	0.0002	505; 508; 525.2; 508.1	0.00002		
Hexachlorobenzene	0.001	505; 508; 525.2; 508.1	0.0001		
Hexachlorocyclopentadiene	0.05	505; 525.2; 508; 508.1	0.0001		
Lindane	0.0002	505; 508; 525.2; 508.1	0.00002		
Methoxychlor	0.04	505; 508; 525.2; 508.1	0.0001		
Oxamyl	0.2	531.1; 6610	0.002		
Picloram	0.5	515.2; 555; 515.1	0.0001		
Polychlorinated biphenyls (PCBs) ⁸ (as decachlorophenyl)	0.0005	508A	0.0001		
Pentachlorophenol	0.001	515.2; 525.2; 555; 515.1	0.00004		

Table G-1: EPA's Minimum Detection Limits						
Contaminant	MCL (mg/l)	Methodology	Detection Limit (mg/l)			
Simazine	0.004	505 ⁷ ; 507; 525.2; 508.1	0.00007			
Toxaphene	0.003	505; 508; 525.2	0.001			
2,3,7,8-TCDD (Dioxin)	3x10 ⁻⁸	1613	5.00e-09			
2,4,5-TP (Silvex)	0.05	515.2; 555; 515.1	0.0002			
Radioactive Contaminants [40 CFR141.25]	Radioactive Contaminants					
Tritium		Liquid Scintillation	1,000 pCi/l			
Stontium-90		Radio-chemical	2 pCi/l			
Strontium-89		Radio-chemical	10 pCi/l			
lodine-131		Radio-chemical	1 pCi/l			
Cesium-134		Radio-chemical; gamma ray spectrometry	10 pCi/l			
Gross beta		Evaporation	4 pCi/l			
Other radionuclides			1/10 of the applicable limit			

Footnotes:

- 1 MFL = million fibers per liter > 10 μ m
- 2 Using a 2X preconcentration step as noted in Method 200.7. Lower MDLs may be achieved when using a 4X preconcentration.
- 3 Screening method for total cyanides
- 4 Measures "free cyanides"
- 5 Lower MDLs are reported using stabilized temperature graphite furnace atomic absorption
- 6. pCi/l = picocuries per liter, a measure of radioactivity
- A nitrogen-phosphorus detector should be substituted for the electron capture detector in Method 505 (or another approved method should be used) to determine alachlor, atrazine, and simazine, if lower detection limits are required.
- 8. PCBs are qualitatively identified as Aroclors and measured for compliance purposes as decachlorobiphenyl.

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Appendix H: Appendices from Subpart O of 40 CFR 141

In an effort to make this guidance document as useful as possible, all of the appendices to the CCR regulation are presented here.

Table H-1 contains information from Appendix A to Subpart O - Converting MCL Compliance Values for CCRs. The CCR rule requires the MCL to be reported as a number equal to or greater than 1. The associated MCLG and detected contaminant level must be reported in the same units as the MCL. Table H-2 contains the following information on regulated contaminants from Appendices B and C to Subpart O of the regulation: MCL; MCLG; major sources in drinking water; and health effects language. The regulation also requires that information on unregulated contaminant monitoring required under 40 CFR 141.40 and ICR monitoring required under 40 CFR 141.142-143 be included in the CCR. Table H-3 provides a list of the unregulated and ICR contaminants.

Table H-1: Converting MCL Compliance Values for CCRs	H-2
Table H-2: Regulated Contaminant Information	H-6
Table H-3: List of Unregulated and ICR Contaminants I	H-20

Table H-1: Converting MCL Compliance Values for CCRs (Appendix A to Subpart O of the CCR Rule)

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/I=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

	Table H-1: Converting MCL Compliance Values for CCRs					
	Contaminant	MCL in compliance units (mg/l)	multiply by	1		
Mi	crobiological Contamir	nants				
1.	Total Coliform Bacteria	-	-	For systems that collect 40 or more samples: 5% of monthly samples are positive For systems that collect fewer than 40 samples per month: 1 positive monthly sample	0	
2.	Fecal coliform and <i>E.</i> coli	-· -·	-	a routine sample and a repeat sample are total coliform positive, and one is also fecal coliform or E. coli positive	0	
3.	Turbidity	-	-	TT (NTU)	n/a	
Ra	dioactive Contaminant	S				
4.	Beta/photon emitters	4 mrem/yr	-	4 mrem/yr	0	
5.	Alpha emitters	15 pCi/l	•	15 pCi/l	0	
6.	Combined radium	5 pCi/l	-	5 pCi/l	0	
Ino	Inorganic Contaminants					
7.	Antimony	0.006	1000	6 ppb	6	
8.	Arsenic	0.05	1000	50 ppb	n/a	

Table H-1: Converting MCL Compliance Values for CCRs						
Contaminant	MCL in compliance units (mg/l)	multiply by	MCL in CCR units	MCLG in CCR units		
9. Asbestos	7 MFL	-	7 MFL	7		
10. Barium	2	-	2 ppm	2		
11. Beryllium	0.004	1000	4 ppb	4		
12. Cadmium	0.005	1000	5 ppb	5		
13. Chromium	0.1	1000	100 ppb	100		
14. Copper	AL=1.3	-	AL=1.3 ppm	1.3		
15. Cyanide	0.2	1000	200 ppb	200		
16. Fluoride	4	-	4 ppm	4		
17. Lead	AL=.015	1000	AL=15 ppb	0		
18. Mercury	0.002	1000	2 ppb	2		
19. Nitrate (as Nitrogen)	10	-	10 ppm	10		
20. Nitrite (as Nitrogen)	1	-	1 ppm	1		
21. Selenium	0.05	1000	50 ppb	50		
22. Thallium	0.002	1000	2 ppb	0.5		
Synthetic Organic Contar	ninants includin	g Pesticides a	nd Herbicides			
23. 2,4-D	0.07	1000	70 ppb	70		
24. 2,4,5-TP [Silvex]	0.05	1000	50 ppb	50		
25. Acrylamide	-	-	тт	0		
26. Alachlor	0.002	1000	2 ppb	0		
27. Atrazine	0.003	1000	3 ppb	3		
28. Benzo(a)pyrene [PAH]	0.0002	1,000,000	200 ppt	0		
29. Carbofuran	0.04	1000	40 ppb	40		
30. Chlordane	0.002	1000	2 ppb	0		
31. Dalapon	0.2	1000	200 ppb	200		
32. Di(2-ethylhexyl)adipate	0.4	1000	400 ppb	400		
33. Di(2-ethylhexyl) phthalate	0.006	1000	6 ppb	0		
34. Dibromochloropropane	0.0002	1,000,000	200 ppt	0		

Table H-1: Converting MCL Compliance Values for CCRs							
Contaminant	MCL in compliance units (mg/l)	multiply by	MCL in CCR units	MCLG in CCR units			
35. Dinoseb	0.007	1000	7 ppb	7			
36. Diquat	0.02	1000	20 ppb	20			
37. Dioxin [2,3,7,8-TCDD]	0.00000003	1,000,000,000	30 ppq	0			
38. Endothall	0.1	1000	100 ppb	100			
39. Endrin	0.002	1000	2 ppb	2			
40. Epichlorohydrin	-	-	тт	0			
41. Ethylene dibromide	0.00005	1,000,000	50 ppt	0			
42. Glyphosate	0.7	1000	700 ppb	700			
43. Heptachlor	0.0004	1,000,000	400 ppt	0			
44. Heptachlor epoxide	0.0002	1,000,000	200 ppt	0			
45. Hexachlorobenzene	0.001	1000	1 ppb	0			
46. Hexachloro- cyclopentadiene	0.05	1000	50 ppb	50			
47. Lindane	0.0002	1,000,000	200 ppt	200			
48. Methoxychlor	0.04	1000	40 ppb	40			
49. Oxamyl [Vydate]	0.2	1000	200 ppb	200			
50. PCBs [Polychlorinated 'biphenyls]	0.0005	1,000,000	500 ppt	0			
51. Pentachlorophenol	0.001	1000	1 ppb	0			
52. Picloram	0.5	1000	500 ppb	500			
53. Simazine	0.004	1000	4 ppb	4			
54. Toxaphene	0.003	1000	3 ppb	0			
Volatile Organic Contaminants							
55. Benzene	0.005	1000	5 ppb	0			
56. Carbon tetrachloride	0.005	1000	5 ppb	0			
57. Chlorobenzene	0.1	1000	100 ppb	100			
58. o-Dichlorobenzene	0.6	1000	600 ppb	600			
59. p-Dichlorobenzene	0.075	1000	75 ppb	75			
60. 1,2-Dichloroethane	0.005	1000	5 ppb	0			

Table H-1: Converting MCL Compliance Values for CCRs					
Contaminant	MCL in compliance units (mg/l)	multiply by	MCL in CCR units	MCLG in CCR units	
61. 1,1-Dichloroethylene	0.007	1000	7 ppb	7	
62. cis-1,2-Dichloroethylene	0.07	1000	70 ppb	70	
63. trans-1,2- Dichloroethylene	0.1	1000	100 ppb	100	
64. Dichloromethane	0.005	1000	5 ppb	0	
65. 1,2-Dichloropropane	0.005	1000	5 ppb	0	
66. Ethylbenzene	0.7	1000	700 ppb	700	
67. Styrene	0.1	1000	100 ppb	100	
68. Tetrachloroethylene	0.005	1000	5 ppb	Q	
69. 1,2,4-Trichlorobenzene	0.07	1000	70 ppb	70	
70. 1,1,1-Trichloroethane	0.2	1000	200 ppb	200	
71. 1,1,2-Trichloroethane	0.005	1000	5 ppb	3	
72. Trichloroethylene	0.005	1000	5 ppb	0	
73. TTHMs [Total trihalomethanes]	0.10	1000	100 ppb	n/a	
74. Toluene	1	-	1 ppm	1	
75. Vinyl Chloride	0.002	1000	2 ppb	0	
76. Xylenes	10	-	10 ppm	10	

Table H-2: Regulated Contaminant Information (Appendices B and C to Subpart O of the CCR Rule)

<u>Key</u>

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 (μ g/l) **ppt**=parts per trillion, or nanograms per liter **ppq**=parts per quadrillion, or picograms per liter **TT**=Treatment Technique

Table H-2: Regulated Contaminant Information					
Contaminant (units)	MCL	MCLG	Major Sources in Drinking Water	Health Effects Language	
Microbiological Contamir	ants				
1. Total Coliform Bacteria	For systems that collect 40 or more samples per month: 5% of monthly samples are positive For systems that collect fewer than 40 samples per month: 1 positive monthly sample	0	Naturally present in the environment.	Coliforms are bacteria which are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.	
2. Fecal coliform and E. coli	A routine sample and a repeat sample are total coliform positive, and one is also fecal coliform or <i>E. coli</i> positive	0	Human and animal fecal waste.	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 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.	

	Table H-2: Regulated Contaminant Information					
	Contaminant (units)	MCL	MCLG	Major Sources in Drinking Water	Health Effects Language	
3.	Turbidity	π	n/a	Soil runoff.	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 include bacteria, viruses, and parasites which can cause symptoms such as nausea, cramps, diarrhea and associated headaches.	
Ra	adioactive Contaminants	s [°]				
4.	Beta/photon emitters (mrem/yr)	4	0	Decay of natural and man-made deposits.	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 (pCi/l)	15	0	Erosion of natural deposits.	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 (pCi/l)	5	0	Erosion of natural deposits.	Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.	

Table H-2: Regulated Contaminant Information							
Contaminant (units)	MCL	MCLG	Major Sources in Drinking Water	Health Effects Language			
Inorganic Contaminants							
7. Antimony (ppb)	6	6	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder.	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 glucose levels.			
8. Arsenic (ppb)	50	n/a	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.	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 (MFL)	7	7	Decay of asbestos cement water mains; Erosion of natural deposits.	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 (ppm)	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.	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 (ppb)	4	4	Discharge from metal refineries and coal-burning factories; Discharge from electrical, aerospace, and defense industries.	Some people who drink water containing beryllium in excess of the MCL over many years could develop internal lesions.			
12. Cadmium (ppb)	5	5	Corrosion of galvanized pipes; Erosion of natural deposits; Discharge from metal refineries; runoff from waste batteries and paints.	Some people who drink water containing cadmium in excess of the MCL over many years could experience kidney damage.			

Table	H-2: Regula	ated Conta	minant Informati	on
Contaminant (units)	MCL	MCLG	Major Sources in Drinking Water	Health Effects Language
13. Chromium (ppb)	100	100	Discharge from steel and pulp mills; Erosion of natural deposits.	Some people who drink water containing chromium in excess of the MCL over many years could experience allergic dermatitis.
14. Copper (ppm)	AL=1.3	1.3	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.	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 (ppb)	200	200	Discharge from steel/metal factories; Discharge from plastic and fertilizer factories.	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 (ppm)	4	4	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.	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 (ppb)	AL=15	0	Corrosion of household plumbing systems; Erosion of natural deposits.	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.

Table	H-2: Regul	ated Conta	aminant Informati	on
Contaminant (units)	MCL	MCLG	Major Sources in Drinking Water	Health Effects Language
18. Mercury [inorganic] (ppb)	2	2	Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills; Runoff from cropland.	Some people who drink water containing inorganic mercury well in excess of the MCL over many years could experience kidney damage.
19. Nitrate [as Nitrogen] (ppm)	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.	Infants below the age of 6 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 [as Nitrogen] (ppm)	1	1	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.	Infants below the age of 6 months who drink water containing nitrite in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.
21. Selenium (ppb)	50	50	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.	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 (ppb)	2	0.5	Leaching from ore- processing sites; Discharge from electronics, glass, and drug factories.	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.

Table	H-2: Regula	ated Conta	minant Information	on
Contaminant (units)	MCL	MCLG	Major Sources in Drinking Water	Health Effects Language
Synthetic Organic Contan	ninants inclu	ıding Pest	icides and Herbic	ides
23. 2,4-D (ppb)	70	70	Runoff from herbicide used on row crops.	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](ppb)	50	50	Residue of banned herbicide.	Some people who drink water containing silvex in excess of the MCL over many years could experience liver problems.
25. Acrylamide	π ,	0	Added to water during sewage/ wastewater treatment.	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 (ppb)	2	. 0	Runoff from herbicide used on row crops.	Some people who drink water containing alachlor in excess of the MCL over many years could have problems with their eyes, liver, kidneys, or spleen, experience anemia, or may have an increased risk of getting cancer.
27. Atrazine (ppb)	3	3	Runoff from herbicide used on row crops.	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] (nanograms/I)	200	О	Leaching from linings of water storage tanks and distribution lines.	Some people who drink water containing benzo(a)pyrene in excess of the MCL over many years may experience reproductive difficulties or may have an increased risk of getting cancer.

Table	H-2: Regul	ated Conta	aminant Informati	on
Contaminant (units)	MCL	MCLG	Major Sources in Drinking Water	Health Effects Language
29. Carbofuran (ppb)	40	40	Leaching of soil fumigant used on rice and alfalfa.	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 (ppb)	2	0	Residue of banned termiticide.	Some people who drink water containing chlordane in excess of the MCL over many years could experience problems with their liver, blood, or nervous system, and may have an increased risk of getting cancer.
31. Dalapon (ppb)	200	200	Runoff from herbicide used on rights of way.	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 (ppb)	400	400	Discharge from chemical factories.	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 (ppb)	6	0	Discharge from rubber and chemical factories.	Some people who drink water containing di (2-ethylhexyl) phthalate in excess of the MCL over many years may have problems with their liver, or experience reproductive difficulties, and may have an increased risk of getting cancer.
34. Dibromochloropropane (DBCP) (ppt)	200	0	Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards.	Some people who drink water containing DBCP in excess of the MCL over many years could experience reproductive problems and may have an increased risk of getting cancer.

Table	H-2: Regula	ated Conta	ıminant Informati	on
Contaminant (units)	MCL	MCLG	Major Sources in Drinking Water	Health Effects Language
35. Dinoseb (ppb)	. 7	7	Runoff from herbicide used on soybeans and vegetables.	Some people who drink water containing dinoseb well in excess of the MCL over many years could experience reproductive difficulties.
36. Diquat (ppb)	20	20	Runoff from herbicide use.	Some people who drink water containing diquat in excess of the MCL over many years could get cataracts.
37. Dioxin [2,3,7,8-TCDD] (ppq)	30	0	Emissions from waste incineration and other combustion; Discharge from chemical factories.	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.
38. Endothall (ppb)	100	100	Runoff from herbicide use.	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 (ppb)	2	· 2	Residue of banned insecticide.	Some people who drink water containing endrin in excess of the MCL over many years could experience liver problems. People exposed to high doses of endrin have had nervous system effects and convulsions.
40. Epichlorohydrin	TT	0	Discharge from industrial chemical factories; An impurity of some water treatment chemicals.	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.

Table	H-2: Regul	ated Conta	aminant Informati	on
Contaminant (units)	MCL	MCLG	Major Sources in Drinking Water	Health Effects Language
41. Ethylene dibromide (ppt)	50	0	Discharge from petroleum refineries.	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 (ppb)	700	700	Runoff from herbicide use.	Some people who drink water containing glyphosate in excess of the MCL over many years could experience problems with their kidneys or adverse reproductive effects.
43. Heptachlor (ppt)	400	0	Residue of banned pesticide.	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 (ppt)	200	0	Breakdown of heptachlor.	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 (ppb)	1	0	Discharge from metal refineries and agricultural chemical factories.	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 (ppb)	50	50	Discharge from chemical factories.	Some people who drink water containing hexachlorocyclopentadiene well in excess of the MCL over many years could experience problems with their stomach or kidneys.

Table	H-2: Regul	ated Conta	aminant Informati	on
Contaminant (units)	MCL	MCLG	Major Sources in Drinking Water	Health Effects Language
47. Lindane (ppt)	200	200	Runoff/leaching from insecticide used on cattle, lumber, gardens.	Some people who drink water containing lindane in excess of the MCL over many years could experience problems with their kidneys or liver, and may have an increased risk of getting cancer.
48. Methoxychlor (ppb)	40	40	Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, livestock.	Some people who drink water containing methoxychlor in excess of the MCL over many years could experience reproductive difficulties.
49. Oxamyl [Vydate](ppb)	200	200	Runoff/leaching from insecticide used on apples, potatoes and tomatoes.	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] (ppt)	500	0	Runoff from landfills; Discharge of waste chemicals.	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 (ppb)	1	0	Discharge from wood preserving factories.	Some people who drink water containing pentachlorophenolinexcess 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 (ppb)	500	500	Herbicide runoff.	Some people who drink water containing picloram in excess of the MCL over many years could experience problems with their liver.

Table	H-2: Regul	ated Conta	aminant Informati	on
Contaminant (units)	MCL	MCLG	Major Sources in Drinking Water	Health Effects Language
53. Simazine (ppb)	4	4	Herbicide runoff.	Some people who drink water containing simazine in excess of the MCL over many years could experience tremors or have problems with their blood.
54. Toxaphene (ppb)	3	0	Runoff/leaching from insecticide used on cotton and cattle.	Some people who drink water containing toxaphene in excess of the MCL over many years could have problems with their thyroid, kidneys, or liver and may have an increased risk of getting cancer.
Volatile Organic Contami	nants			
55. Benzene (ppb)	5	0	Discharge from factories; Leaching from gas storage tanks and landfills.	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 (ppb)	5	0	Discharge from chemical plants and other industrial activities.	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 (ppb)	100	100	Discharge from chemical and agricultural chemical factories.	Some people who drink water containing chlorobenzene in excess of the MCL over many years could experience problems with their kidneys or liver.
58. o-Dichlorobenzene (ppb)	600	600	Discharge from industrial chemical factories.	Some people who drink water containing odichlorobenzene well in excess of the MCL over many years could experience problems with their liver, kidneys, or circulatory systems.

Table	H-2: Regul	ated Conta	aminant Informati	on
Contaminant (units)	MCL	MCLG	Major Sources in Drinking Water	Health Effects Language
59. p-Dichlorobenzene (ppb)	75	75	Discharge from industrial chemical factories.	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 (ppb)	5	0	Discharge from industrial chemical factories.	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 (ppb)	7	7	Discharge from industrial chemical factories.	Some people who drink water containing 1,1-dichloroethylene in excess of the MCL over many years could experience problems with their liver.
62. cis-1,2-Dichloroethylene (ppb)	70	70	Discharge from industrial chemical factories.	Some people who drink water containing cis-1,2-dichloroethylene in excess of the MCL over many years could experience problems with their immune system.
63. trans-1,2-Dichloroethylene (ppb)	100	100	Discharge from industrial chemical factories.	Some people who drink water containing trans-1,2-dichloroethylene well in excess of the MCL over many years could experience problems with their liver or immune system.
64. Dichloromethane (ppb)	5	0	Discharge from pharmaceutical and chemical factories.	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 (ppb)	5	0	Discharge from industrial chemical factories.	Some people who drink water containing 1,2-dichloropropane in excess of the MCL over many years may have an increased risk of getting cancer.

Table H-2: Regulated Contaminant Information				
Contaminant (units)	MCL	MCLG	Major Sources in Drinking Water	Health Effects Language
66. Ethylbenzene (ppb)	700	700	Discharge from petroleum refineries.	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 (ppb)	100	100	Discharge from rubber and plastic factories; Leaching from landfills.	Some people who drink water containing styrene well in excess of the MCL over many years could have problems with their liver, kidneys, or blood.
68. Tetrachloroethylene (ppb)	5	0	Discharge from factories and dry cleaners.	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 (ppb)	70	70	Discharge from textile-finishing factories.	Some people who drink water containing 1,2,4-trichlorobenzene well in excess of the MCL over many years could experience changes in their adrenal glands.
70. 1,1,1-Trichloroethane (ppb)	200	200	Discharge from metal degreasing sites and other factories.	Some people who drink water containing 1,1,1-trichloroethane in excess of the MCL over many years could experience problems with their liver, nervous system, or circulatory system.
71. 1,1,2-Trichloroethane (ppb)	5	3	Discharge from industrial chemical factories.	Some people who drink water containing 1,1,2-trichloroethane well in excess of the MCL over many years could have problems with their liver, kidneys, or immune systems.

Table	H-2: Regula	ated Conta	ıminant Informati	on
Contaminant (units)	MCL	MCLG	Major Sources in Drinking Water	Health Effects Language
72. Trichloroethylene (ppb)	5	0	Discharge from metal degreasing sites and other factories.	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](ppb)	100	n/a	Byproduct of drinking water chlorination.	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 (ppm)	. 1	1	Discharge from petroleum factories.	Some people who drink water containing toluene well in excess of the MCL over many years could have problems with their nervous system, kidneys, or liver.
75. Vinyl Chloride (ppb)	2	0	Leaching from PVC piping; Discharge from plastics factories.	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 (ppm)	10	10	Discharge from petroleum factories; Discharge from chemical factories.	Some people who drink water containing xylenes in excess of the MCL over many years could experience damage to their nervous system.

Table H-3: List of Unregulated and ICR Contaminants

Unregulated Contaminants for which EPA requires monitoring under 40 CFR 141.40

[* = regulations do not require monitoring for these contaminants in all States]

Aldicarb	Chloroform	3-Hydroxycarbofuran
Aldicarb sulfone	Chloromethane	Isopropylbenzene*
Aldicarb sulfoxide	o-Chlorotoluene	p-Isopropyltoluene*
Aldrin	p-Chlorotoluene	Methomyl
Bromobenzene	Dibromomethane	Metolachlor
Bromochloromethane*	Dicamba	Metribuzin
Bromodichloromethane	m-Dichlorobenzene	Naphthalene*
Bromoform	Dichlorofluoromethane*	Propachlor
Bromomethane (methyl bromide) Butachlor	1,1-Dichloroethane	n-Propylbenzene*
	2,2-Dichloropropane	Sulfate
sec-Butylbenzene*	1,3-Dichloropropane	1,1,1,2-Tetrachloroethane
•	1,1-Dichloropropene	1,1,2,2-Tetrachloroethane
n-Butylbenzene* tert-Butylbenzene*	1,3-Dichloropropene	1,2,3-Trichlorobenzene*
•	Dieldrin	1,2,3-Trichloropropane
Carbaryl Chlorodibromomethane	Fluorotrichloromethane*	1,2,4-Trimethylbenzene*
Chloroethane	Hexachlorobutadiene*	1,3,5-Trimethylbenzene*
CITICIOCUIUIIO		

ICR Microbial Contaminants (40 CFR 141.142 - 141.143)

If the following contaminants are found in finished water, suppliers must report them in the CCR detected contaminant table: total coliforms, fecal coliforms or *Escherichia coli, Giardia*, and total culturable viruses.

<u>Note</u>: Any monitoring results (including those to satisfy ICR requirements) indicating the presence of *Cryptosporidium* in either the source or finished water must be displayed outside the detected contaminant table, elsewhere in the report.

ICR Disinfection Byproducts

- If the following contaminants are found in the finished water, suppliers must report them in the CCR:
 - 1. For all treatment plants participating in the ICR monitoring
 - THM4: Report trihalomethanes (chloroform, bromodichloromethane, dibromochloromethane, and bromoform) as a group.
 - **HAA5:** Report haloacetic acids (mono-, di-, and tri-chloroacetic acid; and mono- and di-bromoacetic acid) as a group.
 - *HAN:* Report haloacetonitriles (dichloro-; trichloro-; bromochloro-; and dibromoacetonitrile) as a group.
 - **HK:** Report haloketones (1,1-dichloropropanone and 1,1,1-trichloropropanone) as a group.
 - **CP:** Chloropicrin.
 - CH: Chloral hydrate.
 - TOX: Total organic halides.

Disinfectant residual

- 2. For treatment plants using Chloramines: -- Cyanogen chloride.
- 3. For treatment plants using Hypochlorite Solutions: -- Chlorate
- 4. For treatment plants using Ozone: -- Bromate, Aldehydes
- 5. For treatment plants using Chlorine Dioxide:
 - Chlorine Dioxide residual.
 - Chlorite
 - Chlorate
 - Bromate
 - Aldehydes

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Appendix I: Information on Source Water Assessment Programs (SWAPs) and Susceptibility Determinations

Appendix I provides more detailed information on State SWAP programs, wellhead protection programs and other source water information resources. On the following pages, you will find:

- Background information on source water assessments and susceptibility determinations referenced in Section 141.153 (b)(2) of the CCR rule.
- A discussion of CCR rule provisions that require highlighting of source water assessments.
- Examples of how a water system might incorporate the results of source water assessments into a CCR.

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Source Water Assessment Program

Background

The 1996 amendments to the Safe Drinking Water Act (SDWA) include a focus on pollution prevention which complements the traditional treatment approach to ensuring safe drinking water. In Section 1453, the amendments require states to develop Source Water Assessment Programs (SWAPs) and submit them for EPA approval in February of 1999. EPA has a nine month period in which to review and approve these programs and then, upon approval, States will have up to three and a half years to complete source water assessments for all public water systems (PWS). These assessments will include delineation of a source water protection area, inventory of potentially significant sources of contamination, and a determination of the susceptibility of the PWS to these potential contamination sources.

As part of an approved program, States must make the results of these assessments available to the public - either directly or through a delegated entity. This last requirement can, in part, be met through the requirements of the CCR rule that water systems provide susceptibility determinations to the public once an assessment has been completed. State source water assessments provide a springboard for local wellhead and watershed protection efforts. Although information about source water protection efforts is not specifically required in CCRs, the reports offer an excellent opportunity for water systems to explain how a community's drinking water supply is being protected.

Program Overview

When assessments conducted under the 1453 Source Water Assessment Program, are complete, States should provide information about the availability of these assessments and a brief summary of the results, i.e. the susceptibility of the system to contamination, for inclusion in the CCR. State personnel responsible for CCR implementation should coordinate closely with the source water program personnel in order to estimate when this assessment information would be available to water systems (This task may require extra effort where the SWAP program is located in another division or agency).

Many states are conducting assessments through local watershed efforts and the ongoing implementation of Wellhead Protection Programs (WHP) that may be used to satisfy or go beyond the SWAP assessment requirements. Wellhead programs may either be voluntary or mandatory for water systems depending on the States' program, but do include development of wellhead management plans. Watershed protection plans are all voluntary. Approximately 4,400 CWS systems nationwide have completed wellhead management plans although many more are in some stage of the process. Most States will be integrating SWAP and WHP activities. One of the key distinctions between the new SWAPs and existing wellhead programs and watershed protection programs is that SWAPs will explicitly include a determination about the susceptibility of the drinking water system to sources of contamination. These determinations will be needed for the purposes of CCR reporting since the CCR rule requires that reports contain a brief summary of the results of these susceptibility determinations.

More information about State SWAP programs, including a list of State source water contacts and links to State source water web sites can be found through http://www.epa.gov/safewater.

Incorporating Source Water Assessment Results in CCRs

Information about source water is an important part of the consumer confidence report. Table I-1 is a list of the report requirements related to source water. Requirements are highlighted in bold and followed by additional information.

Table I-1: CCR Requirements Referencing Source Water Assessment Results								
Rule/ Guidance Citation	Requirement							
§141.153 (b)(1), §141.153 (d)(5), CCR Guidance: Section I, B.1: Items 2, 5	Each report must identify the source(s) of water delivered by the CWS by providing information on: the type of water used (i.e. surface water or ground water), the commonly used name (if any) and the location of the body (or bodies) of water. For surface water, the water body, such as a river, where the intake is located would be appropriate. The name of the watershed or sub-watershed could also be included. For ground water, the name of the principle aquifer would be appropriate. EPA encourages the use of simple maps to illustrate the extent of each system's protection area. A system does not need to report data from every well in it's well field. However, a system using more than one raw water source in independent distribution systems needs to account for each source. Explaining inter-connections and back-up sources will help consumers understand that the source of their water may vary during the year.							
§141.153 (b)(2) CCR Guidance: Section I, B.1: Items 2, 5	If a source water assessment has been completed, the CCR must: 1) notify consumers that this information is available, and 2) tell them how to obtain the information Where a system has received a source water assessment from the State, the report must include a brief summary of the systems's susceptibility to potential sources of contamination, using language provided by the State or written by the operator. If an assessment is conducted as part of a State's EPA approved Source Water Assessment Program, a brief summary of the susceptibility determination must be provided in the CCR, in addition to information on availability. As part of an approved program, States must make the results of these assessments available to the public - either directly or through a delegated entity. This often could extend beyond, but can, at minimum, be met in part by having systems provide a summary of the results of the susceptibility determination in the CCR. States can either provide this information to the system or, in the case where responsibility for the assessment has been delegated, provide clear guidance on how the results should be presented to the public. Many state programs will produce brief system-specific reports summarizing the results of these assessments which water systems can use for the CCR.							

Table I-1: CCI	Table I-1: CCR Requirements Referencing Source Water Assessment Results							
Rule/ Guidance Citation	Requirement							
	If the source water assessment has not been completed, systems could indicate when that information will be available to the public. Systems are encouraged to include information about specific significant sources of contamination in the source water area if they have readily available information from the assessments or other sources such as wellhead management plans, sanitary surveys, watershed assessments, special water quality studies, and other publicly available information.							
§141.153 (d)(4)(ix) CCR Guidance: Section I, B.1: Item 4	Each report must include the likely source(s) of detected contaminants to the best of the operator's knowledge. Specific information regarding the likely source (s) of the 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(s), the report must include one or more typical sources given in the Appendix B of the rule for the detected contaminant. (See Appendix H of this guidance for the list of typical sources). Even if a source water assessment is not yet complete, the state may have preliminary data about potential contamination sources from state-wide data bases or can provide additional information about the types of potential sources of contamination associated with particular contaminants.							
§141.153 (e)(1) CCR Guidance: Section I, B.1: Items 4, 5	If a system has performed any monitoring, including monitoring to satisfy ICR requirements, which indicate that <i>Cryptosporidium</i> may be present in the raw or finished water, the report must include a summary of the results of the monitoring and an explanation of the significance of the results.							
§141.153 (h)(1) CCR Guidance: Section I, B.1: Item 6	Every CCR must contain a brief explanation about the sources of drinking water and contaminants that may be present in the source water. Systems can either use the language provided in CFR 141.153(h)(1)(i) and (ii) or develop comparable language.							

CCR Examples - Summarizing Results of Source Water Assessments

Most source water assessments will be completed by the year 2003. Many source water assessments will be available before this date. Examples of how results of these assessments could appear in a CCR are given below.

Table	e I-2: CCR Examples - Source Water Information
Ground water source Source water assessment not available	Our water comes from three municipal wells drilled 500 feet into an underground source of water called the Low Plains Aquifer. These wells are located west of town on the north side of City Park. The town owns the land immediately around the wells and restricts certain activities on that property. The State will be doing a complete assessment of our source water which will be completed by January 2001. In the 2001 CCR we will summarize the source water assessment results and let you know how to get a copy of the completed assessment and all related information.
Ground water source Source water assessment available	Our water comes from three wells drilled about 500 feet into an underground source of water called the Low Plains Aquifer. These wells are located west of town on the north side of City Park. The wellhead protection area for these wells extends approximately 2000 feet north, 4000 ft south and 1500 ft east and west of the well field. (Please see the map). We have a town ordinance that prohibits dumping and many other activities that could pollute our drinking water in this wellhead area. The Department of Environmental Resources (DER) completed an assessment of our source water in January of 2001 and has reported that our raw water is most susceptible to contamination from abandoned irrigation wells and farm runoff. The town has done a follow-up investigation and has identified two abandoned wells. They have been properly plugged. Farm runoff continues to be a concern. Please contact the County Extension Service at [phone number] to get a list of area farmers participating in a three county source water protection program. You can get a summary of our assessment by calling the DER Region 1 office at [phone number]. A full copy of the assessment is available in the town clerk's office or on the Internet [Internet address].
Source water assessment available Contaminants detected	Our drinking water comes from 5 municipal wells sunk 100 - 175 feet into a shallow unconfined aquifer which extends north of town. Wells 1, 2, & 3 provide all of our water for most of the year. Wells 4 & 5 are only used during water shortage emergencies - usually in late August. In January of 2001, the Pheasantville Waterworks Department conducted a source water assessment with funds provided by the State Source Water Protection Program. The assessment includes a vulnerability ranking a prioritized list of the Possible Contaminating Activities (PCAs) identified in the source water assessment. The vulnerability ranking is based on the risk posed by each PCA (relative risk to drinking water supplies), the protection zone in which the PCA occurs, and the Physical Barrier Effectiveness rating (how effective the source and site are at preventing contaminants from reaching the drinking water). Activities at the top of the Pheasantville Vulnerability Ranking include Gas Stations (current and historic), Dry Cleaners, and Leaking Underground Storage Tanks. These activities are known, or believed, to have caused the presence of contaminants in Well 4 (1,2 DCA) and Well 5 (Benzene). Other activities at the top of the Pheasantville Vulnerability Ranking are Chemical Storage, Metal Plating/Finishing, Plastics/Synthetics Producers, Septic Systems on Parcels Less than One Acre, and Sewer Lines. You can get a copy of this assessment, including a map of the source water protection area, by calling the Waterworks Consumer Affairs Department at [phone number] or access it on the Internet at [Internet address].

Table I-2: CCR Examples - Source Water Information								
Surfa	ce water Source water assessment not available	Our water is taken from the Grubstake river near Spitfire Junction. We collect water in the McErtel reservoir (Please see the map) and then pipe it to the treatment plant just northwest of town. We restrict access to the reservoir to protect our water from contamination. We are working with the State drinking water program to identify what other kinds of pollution our water supply could be vulnerable to. We will report the results of the source water assessment to you in this report next year. Our Utility is a major sponsor of the Grubstake Watershed Coalition. Please call us at [phone number] to find out how you can get involved.						
Surfac	ce Water Source water assessment available Cryptosporidium detected	Our utility serves you treated surface water which is taken from the Grubstake river near Spitfire Junction. We collect it in the McErtel Reservoir and then pipe it to the treatment plant just northwest of town. The State drinking water program through a source water assessment report has found that our drinking water is potentially most susceptible to farm runoff as well as three underground storage tanks in Spitfire county. However, we have not detected any contaminants from these sources in our drinking water. You can get a copy of the source water assessment by calling the state drinking water program at [phone number].						
		In December of 1998, we voluntarily monitored for <i>Cryptosporidium</i> , a microbial parasite commonly found in surface water, and found some evidence of these microbes in the raw, but not the finished water. Current test methods do not enable us to determine if these organisms are capable of causing disease. We are not aware of a specific source of <i>Cryptosporidium</i> . <i>Cryptosporidium</i> may come from wildlife or cattle grazing near the reservoir. <i>Cryptosporidium</i> must be ingested for it to cause disease, and may be passed through other means than drinking water. Symptoms of infection include nausea, diarrhea, and abdominal cramps. These symptoms can also be the result of food related organisms or flu or ingesting untreated water. Most healthy individuals are able to overcome the disease within a few weeks. However, some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised people, such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people living with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk. These people should seek advice from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by <i>Cryptosporidium</i> and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).						
Surfac	se water Source water assessment available Cryptosporidium not detected	Our utility serves you treated surface water which is taken from the Grubstake river near Spitfire Junction. We collect it in the McErtel Reservoir and then pipe it to the treatment plant just northwest of town. The State drinking water program has found that our drinking water is potentially most susceptible to farm runoff and three underground storage tanks in Spitfire county. However, we have not detected any contaminants from these sources in our drinking water. You can get a copy of this state information by calling the state drinking water program at [phone number].						

Table I-2: CCR Examples - Source Water Information

Surface Water

- Source water assessment not available
- Known potential source of contamination

Your water is taken from the Grubstake river near Spitfire Junction. The Grubstake river is part of the Fuller Watershed. We collect the water in the McErtel Reservoir and then pipe it to the treatment plant just northwest of town. We have established an emergency plan to deal with the potential of industrial accidents contaminating our source. We have worked with the Spitfire Finishing Plant to minimize the likelihood of contamination. The State Drinking Water program is doing source water assessments for all communities and should have results for our community available by January 2001. Please call us at [phone number] if you would like more information about this assessment.

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Appendix J CCR Compliance Strategy

The CCR compliance strategy, developed with participation from EPA Regions, outlines actions EPA Regions should take to address CCR rule noncompliance during the first year of CCR rule implementation. This strategy establishes expectations for compliance and enforcement activities under the CCR rule, since no significant noncomplier (SNC) definition has been developed for the rule.

The CCR compliance strategy emphasizes compliance assistance and outreach to minimize rates of noncompliance as well as the use of model materials to provide consistent and graduated enforcement responses for the first year. Based upon an evaluation of the rates and types of noncompliance, EPA in consultation with primacy States will adjust this strategy for the following years.

Memo Announcing the CCR Compliance Strategy	у.	 	•	 	•	 	 • •,	 •	• •		 •	J-2
CCR Compliance Strategy		 		 		 	 	 		• •	 	J-5



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

MEMORANDUM

SUBJECT:

First Year Consumer Confidence Report (CCR)

Rule Compliance Strategy

FROM:

Eric V. Schaeffer, Director

Office of Regulatory Enfo

Cynthia C. Dougherty,

Office of Groundwater and Drinking Water

Elaine G. Stanley, Direct

Office of Compliance

TO:

Water Division Directors, Regions I-X

Enforcement Division Directors Regions I, II, VI, and VIII

Region Counsels, Regions I-X

The first deadline in the Consumer Confidence Report (CCR) Rule, October 19, 1999, is fast approaching. This is an important new Public Right to Know rule mandated by the 1996 Safe Drinking Water Act Amendments requiring several first-time activities for all community water systems. To address many of the new start-up requirements and initial implementation activities, we are issuing a first-year compliance strategy emphasizing compliance assistance and outreach, and model materials. Beginning late next spring and following an evaluation of rates and types of noncompliance problems, we will adjust this strategy, working with primacy states, for the following years. The major components of the strategy include:

- Distribution of informational materials to all community water systems;
- Mailing of noncompliance/show cause letters to all water systems which our data base indicates have not prepared a CCR;
- Evaluation of type and root causes of noncompliance:
- Issuance of administrative orders for a targeted subset of noncompliers and appropriate press releases prior to the July 1, 2000 deadline for the subsequent CCR.

This compliance strategy reflects a great deal of hard work by you and your staff. As you are aware, the strategy was developed with Regional participation and reviewed by a steering committee composed of senior managers from Region I, IV, and IX and from the Office of Groundwater and Drinking Water and Office of Regulatory Enforcement. The strategy sets out clear first year expectations for compliance and enforcement activities under the CCR rule. The purpose of the CCR Compliance Strategy is to provide consistent and graduated enforcement responses using model compliance and enforcement tools. The strategy is designed to be implemented by EPA Regions in all States; however, where EPA Regions and the States have negotiated implementation agreements for this regulation, States may have the lead and may take more stringent actions consistent with their authorities. In addition, if a State obtains primary enforcement responsibility for the CCR during this first year, the Regions, as part of the primacy process, will negotiate with the State an appropriate escalating compliance strategy consistent with this national strategy.

To comply with the CCR rule, all community water systems must prepare a Consumer Confidence Report and deliver the report to their customers, the State primacy agency, and any other agency designated by the State primacy agency. The water systems must also send to the State a certification (within three months of the required CCR delivery date) that the system has distributed the report and used correct information. The first report is due by October 19, 1999 and subsequent reports by July 1, each year thereafter. Certifications must be sent to the State by January 19, 2000 for the first report and by October 1, annually for subsequent reports. A summary of the key dates in the compliance strategy is attached for your reference.

Compliance assistance and enforcement of the CCR rule are imperative to ensure implementation of this important Public Right to Know regulation. This compliance strategy will continue the current momentum Regions and States have obtained in their current compliance assistance efforts. We thank you for all of the Regional effort taken to develop this national strategy. Please contact Richard Alonso in the Water Enforcement Division, ORE, at (202)564-6048 if you have any questions.

Attachment

cc: Drinking Water Branch Chiefs
Public Water Systems Enforcement Coordinators
Public Water Systems Regional Attorneys
OECA Enforcement Coordinators

Key Dates in the First Year Consumer Confidence Report (CCR) Rule Compliance Strategy

By October 19, 1999	Community Water Systems (CWSs) prepare and deliver the Consumer Confidence Report to their customers, the State primacy agency, and any other agency designated by the State primacy agency
By January 19, 2000	CWSs send certification to State that the system has delivered the report and used the correct information.
By April 1, 2000	Regions (or States where the State has agreed to perform this task) distribute noncompliance or show cause letters to CWSs which according to records have not prepared or distributed the CCR.
By May 31, 2000	Regions identify water systems which should receive federal administrative orders for not preparing the CCR. Headquarters conducts analysis of noncompliance with the CCR.
Prior to July 1, 2000	Decision made on national or Regional press releases outlining compliance with and enforcement activities for the CCR.
By July 1, 2000	CWSs prepare second CCR and distribute it to their customers, the State primacy agency, and any other agency designated by the State primacy agency.

Consumer Confidence Report (CCR) Rule Compliance Strategy

Introduction

To comply with the Consumer Confidence Report (CCR) rule, all community water systems must prepare a CCR and deliver the report to their customers, the State primacy agency, and any other agency the primacy agency designates. The water system must also send to the State a certification (within three months of the required CCR delivery date) that the system has distributed the report and used correct information in it. The first report is due by October 19, 1999 and subsequent reports by July 1, each year thereafter. Certifications must be sent to the State by January 19, 2000 for the first report and by October 1, annually for subsequent reports.

The purpose of the CCR Compliance Strategy is to provide an outline of compliance assistance tools and responses to noncompliance. The strategy is intended to be clear and simple and is to be implemented by EPA Regions in all States. However, where EPA Regions and the States have negotiated implementation agreements for this regulation, States may have the lead and may take more stringent actions consistent with their authorities. In addition, if a State obtains primary enforcement responsibility for the CCR during this first year, the Regions, as part of the primacy process, will negotiate with the State an appropriate escalating compliance strategy consistent with this national strategy. In general, EPA action will not be necessary where a State takes appropriate action consistent with the CCR Compliance Strategy.

Outreach/Education and Compliance Assistance

EPA Headquarters and Regions have developed several implementation aids and compliance assistance tools to assist EPA Regions, States, and community water systems with implementation of the CCR rule. One of the centerpieces of the compliance assistance tools for public water systems is a plain-English manual on rule requirements and on preparation of CCRs. The manual was developed by the Office of Groundwater and Drinking Water (OGWDW) and is entitled *Preparing Your Drinking Water Consumer Confidence Report*. The manual is available on the Internet and is being distributed directly to public water systems throughout the country. In addition, the Agency developed the *CCR Writer*, an electronic template to help systems prepare their CCRs, which is also available on the Internet.

It is expected that every system will be sent consistent compliance materials by either EPA Regions or by the States in accord with State-EPA Implementation agreements. The Office of Enforcement and Compliance Assurance (OECA) is providing a simple plain English compliance brochure that discusses the rule, reporting obligations, and deadlines. This brochure is folded and franked, requiring only a label for mailing. The brochure will be distributed in August 1999 to Regions to assist their continuing outreach and education efforts. The goal of the brochure is to ensure proper and consistent fair notice to the regulated community of the new CCR requirements. In those cases where systems have *not* been notified of the CCR rule requirements by either EPA or the State, Regions (or States where the State has agreed to perform this task through a State-EPA Implementation Agreement) should forward this brochure to systems to ensure proper notice.

OECA will also place CCR materials in the Local Government Environmental Assistance Network (LGEAN). LGEAN is a compliance assistance center established by OECA to assist local governments with regulatory and technical issues. LGEAN can be reached by either the Internet (www.lgean.org) or its toll-free telephone number (1-877-TO LGEAN). The Regions are encouraged to use LGEAN as a tool for providing compliance assistance and outreach. Upon request, OECA will provide the Regions with material on LGEAN that may be distributed to the water systems. Finally, OECA will place CCR materials on other appropriate web sites of pre-identified associations/organizations.

The lengthier *CCR State Implementation Guidance*, prepared by OGWDW, provides States and Regions with information on rule requirements, reporting violations, and primacy revision applications. EPA Headquarters also developed and delivered CCR training workshops for Regions and States. EPA is also preparing public service announcements and other outreach materials to inform consumers about CCRs.

These outreach efforts and tools will supplement a variety of efforts performed by the Regions. Most Regions have provided training on the rule for their States, as well as worked in partnership with the States to provide training to water systems. Some Regions have provided training directly to public water system operators. Regions also worked with a number of outside organizations to prepare templates and outreach materials such as CCR fact sheets, articles, and brochures. In light of all of these efforts and compliance assistance tools, the Agency expects that all community water systems will have proper and adequate notice of the new regulatory requirements before the first CCR is due on October 19, 1999.

Noncompliance (Show Cause) Letters

EPA anticipates receiving from the States in February 2000, lists of all systems that prepared a CCR and delivered it appropriately in October. To verify completeness and accuracy of the lists and to capture any late reporting information, at a minimum, the Regions (or States where the State has agreed to perform this task) will mail noncompliance or show cause letters to the drinking water systems for which there is no record of a CCR submission. These letters should be distributed to systems before April 1, 2000. To aid the Regions, OECA will develop a model letter for Regions to mail to systems where our information indicates that the system did not prepare the CCR. The letter will (1) state that EPA records show the system did not prepare a CCR, (2) explain the regulatory requirements and their importance, (3) explain that failure to report can result in an enforcement action, including penalties for failure to comply with the enforcement action, and (4) notify the system of the July 1, 2000 deadline for the subsequent report. In cases where States have agreed through State-EPA Implementation Agreements to send out similar show cause letters, the Regions will not be required to send the noncompliance letters. Instead, Regions should forward the model letter to the States to provide an example of the minimum content that a noncompliance letter should contain. Regions and States may tailor the model letter to the local situation. In addition, as noted earlier, if a State obtains primary enforcement responsibility during this first year, the Region will work with the State to develop the State compliance strategy consistent with this national strategy.

If EPA is enforcing against or investigating a particular water system for violations unrelated to the CCR and EPA has information that the system did not prepare a CCR as required by the regulations, then the violation of the CCR can be added to the enforcement case without first issuing the noncompliance letter. Regional staff should consult Richard Alonso in ORE-Water Enforcement Division for additional assistance on these issues.

Based on levels of compliance, EPA may issue national and/or regional press releases as necessary to identify and publicize systems that did not prepare a report after receiving the noncompliance letters. Such publicity often motivates systems to return to compliance. Further, the press releases will serve to remind systems of the deadline for the second report.

After analysis of the noncompliance data associated with the first report, OECA will consider listing, in future Annual Compliance Reports, the public water systems that did not prepare a CCR. Alternatively, the Annual Compliance Reports may provide a percentage of systems in noncompliance with the CCR regulations for each State.

Formal Enforcement Action for Non-Compliance

Before the end of May 2000, Regions will identify water systems that will receive federal Administrative Orders (AOs). While the Agency is stressing compliance assistance for the first CCR, the Regions are encouraged to issue AOs within the first year to address egregious cases and for other reasons to ensure that CCRs are taken seriously by water systems. Taking Regional resources into consideration, system size and/or compliance history can be used to determine whether an AO should be issued for failure to do a CCR. OECA will develop a model Administrative Order for CCR violations to aid enforcement personnel and maximize resources in the CCR enforcement process. For the first report deadline, we expect all federal enforcement to be preceded by the show cause letters. Federal enforcement does not need to be preceded by a noncompliance letter for missing a subsequent report deadline. However, in cases where a State has interim primacy for the CCR rule, EPA will need to issue a Notice of Violation to the State and the system as required under SDWA Section 1414. The show cause letter can serve as the notice to a State under SDWA 1414. In cases where a State has agreed to issue AOs and compliance data is reviewed for accuracy and reliability, a State would not have to issue a noncompliance letter before issuing an AO. At a minimum, all systems not receiving AOs the first year will be considered priority for AOs the second year, especially if they do not meet the second year deadline.

Compliance Analysis

In the Spring of 2000, OECA will conduct an analysis of noncompliance, outlining categories of noncompliance with the CCR. The purpose of the analysis will be to focus and target continuing outreach, compliance assistance, and enforcement to reduce noncompliance among systems in a given category. Categories may include large systems, small systems, rural communities, or significant noncompliance (SNC) status.

Based on levels of compliance and enforcement activities, EPA will consider issuing a national and/or regional press releases outlining Federal enforcement activities of the CCR prior to the second year reporting deadline of July 1, 2000.

Report Quality

During the first years of implementation of this rule, EPA intends for the focus to be on whether a community water system prepared an educational CCR and distributed it in accordance with the rule. Several resources such as templates and guidance provided by EPA, as well as templates and materials developed by other organizations, are available to help systems produce the report. Therefore, EPA expects that most of the reports will adequately meet the report content requirements under the rule.

EPA believes that States should make a good faith effort to check the quality of some reports. EPA recognizes that States and Regions have limited resources and will wish to prioritize the allocation of resources in reviewing the quality of CCRs. This area may become a focused priority in future years. Regions and States should have agreed upon a plan for review and specified the level of detail of those quality checks in the State-EPA Implementation Agreement. Review procedures could be based on criteria such as population served, SNC status, or violation history. States may wish to prioritize water systems and take special care to ensure that those considered high priority, such as the largest systems in the State or systems with a record of noncompliance, issue CCRs completely, accurately, and on-time.

Conclusion

This compliance strategy will continue the current momentum Regions and States have obtained in their current compliance assistance efforts and will help ensure successful implementation of the CCR rule. EPA will revisit this strategy after the first year and address such issues as late reporting and data quality responses. Please contact Richard Alonso, ORE-Water Enforcement Division (202/564-6048) if you have any questions on this strategy.

Appendix K Memorandum on Alternative MCL Reporting Format

EPA believes the format requirement specified in 40 CFR 141.153(d)(4)(i) that the MCL be reported as a number greater than or equal to one can be changed only in very limited circumstances. This appendix contains a memorandum dated June 29, 1999 that clarifies what those conditions are and the specific criteria under which those conditions may be met.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

JUN 29 1999

MEMORANDUM

Subject:

Consumer Confidence Report (CCR) Rule - Units for Reporting Detected

Contaminants

To:

Water Division Directors

Regions I - X

From:

Office of Ground Water and Drinking Water

I am writing to reaffirm our policy on reporting units for detected contaminants in Consumer Confidence Reports (CCRs). The CCR rule requires water systems to list detected contaminants and to show corresponding Maximum Contaminant Levels (MCLs) and the level detected. The MCL must be expressed as a number greater than or equal to one and the level detected must be expressed in the same units.

Some states contend that CCRs should be prepared with the units most commonly used by water systems. States argue that using these units would limit the effort required to prepare reports and minimize errors. However, we believe that the effort to convert units is well spent. Focus groups conducted independently by EPA and the American Water Works Association showed that the public finds numbers greater than or equal to one easier to understand and use as a basis for comparing with detected levels. I believe that templates produced by EPA and other organizations that automatically convert data will make reporting in numbers greater than or equal to one less difficult for water systems.

At the Association of State Drinking Water Administrators (ASDWA) Winter Meeting, I was asked about the type of information and research that would be required before EPA would approve a CCR Rule primacy revision application that allowed MCL reporting in other than numbers greater than or equal to one. I responded that I would consider approval of such an application upon a good faith State effort showing the proposed reporting format is favored by the State's public over using numbers greater than or equal to one. I believe that there should be a high bar for public involvement for changing the reporting format for detected contaminants. Public involvement should include documented focus group research. This research should target members of communities served. Representatives from water systems and other drinking water professionals can be involved in the research, but they should not be considered the target audience. If the process shows that consumers find an alternative MCL format easier to understand, I would consider approving a State primacy revision application including that format. Thus far no State has tried to make this demonstration.

I strongly recommend that States include their EPA region and a wide range of stakeholders in developing any focus group methodology. If a State intends to change the MCL presentation format, I recommend that the State submit a draft primacy revision application documenting the methodology and the focus group research and explaining the proposed changes.

All focus group research conducted to date that we are aware of shows that numbers greater than or equal to one for presentation of MCLs are easiest for consumers to understand. Please call me with any questions or comments at (202)-260-5543 or have your staff call Kathy Williams at (202)-260-2589.

cc: CCR Implementation Workgroup Vanessa Leiby, ASDWA THIS PAGE INTENTIONALLY LEFT BLANK

Appendix L Additional Resources Available to Prepare CCRs

In addition to this State implementation guidance, EPA has developed other implementation aids to help States and systems comply with the CCR regulation.

- A computerized "fill-in-the blank" template that CWSs may use to create a plain but effective CCR.
- A "how to" manual for water suppliers on preparing CCRs.
- The Safe Drinking Water Hotline (800-426-4791) is a resource for health related questions and water quality issues.
- Additional information on the CCR and related topics can be found on the EPA website: http://www.epa.gov/safewater/ccr1/html.

States

 Many State drinking water agencies are conducting training workshops and developing outreach materials for systems on the CCR. Some States are providing monitoring data and developing their own templates to help systems create more useful CCRs.

Other Organizations

Several organizations are preparing resources such as electronic templates, handbooks, and training seminars to help CWSs prepare CCRs.

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