

Creating a Consumer Confidence Report

aka Drinking Water Quality Report

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“I never drink water because of the disgusting things fish do in it.”

W. C Fields



Consumer Confidence Report Rule (CCR):

Mandated by the 1996 amendments to the
Safe Drinking Water Act (SDWA)

Final Rule EPA 816-F-98-007

40 CFR, Part 141, Subpart O
(Parts 141.151 to 141.155

inclusive, adopted NAC 445A.4525)



Required of all Community Water Systems

- Water suppliers of 15 or more connections or serving 25 or more people year round must prepare and distribute an annual water quality report to all billing units or service connections



Purpose of the Consumer Confidence Report

- The Consumer Confidence Report (CCR) is a brief, complete, and easily understood summation of the previous year's water quality
- The report tells where drinking water comes from, what's in it, and how one can help protect it.



Purpose of CCR

- Provides valuable information to your customers and allows them to make personal health-based decisions regarding their drinking water consumption
- Encourages consumers to learn about their drinking water and potential contaminants
- Encourages consumers to become involved in efforts of source water protection

What a CCR is not:

- Several pages of test results from the laboratory (raw data)
- A list of chemicals *not* detected
- A Document full of typos and data errors



Requirements of the CCR (What a CCR does include)

- A. Information about the Water System:
 1. Name and phone number of contact person
 2. Information on public participation opportunities (time and place of meetings or hearings)
 3. Information for non-English speaking populations (if applicable)

Requirements

B. Source of Water

1. Type (i.e. ground or surface water)
2. Source of water (i.e. lake, river, aquifer etc.)
3. Availability of source water assessment
4. Brief summary on potential sources of contamination (if available)*

* = text provided



Requirements

C. Definitions

1. Maximum Contaminant Level (MCL)
2. Maximum Contaminant Level Goal (MCLG)
3. Action Level
4. Treatment Technique (TT)*
5. Maximum Residual Disinfectant Level (MRDL)*
6. Maximum Residual Disinfectant Level Goal (MRDLG)*
7. Variances and Exemptions*

* = if applicable

Requirements

D. Detected Contaminates

1. Table summarizing contaminants (both regulated and unregulated) detected during last round of testing
2. Known or likely source of each detected contaminant*
3. Health effects language for any violations, exceedances, or if Arsenic levels are between 5 and 10 ppb

* = text provided

Reporting Detected Contaminants

- Include highest level and range to determine compliance of any contaminant detected

Regulated Contaminants	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
ARSENIC	1/2/2013	4	2.2 - 4	ppb	10	0	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.

Reporting Detected Contaminants

- For any detected contaminant that violates an MCL, a TT, or exceeds an AL, the CCR must contain:
 - A clear indication of the violation or exceedence in the Table
 - A clear and easy to understand text explanation of the violation or exceedence

Requirements

E. Compliance with Drinking Water Regulations

1. Explanation of violations, length of violations potential health effects and steps taken to correct the action
2. Explanation of variance/exemption (if applicable)

Type	Category	Analyte	Compliance Period
MONITORING (TCR), ROUTINE MAJOR	Failure to Monitor	COLIFORM, TOTAL (TCR)	4/1/2013 - 4/30/2013
MCL (TCR), MONTHLY	Maximum Contaminant Level Violation	COLIFORM, TOTAL (TCR)	6/1/2013 - 6/30/2013

Violations

During the 2013 calendar year, Acme Water System is required to include an explanation of the violation(s) in the table above and the steps taken to resolve the violation(s) with this report.

Coliforms were found in more samples than allowed and this was a warning of potential problems. We had one positive sample for Total Coliform in June of 2013. We took several follow up tests, and all additional monitoring for Coliform indicated no presence of this biological contaminant.

Monitoring and Reporting Violation

We failed to complete required sampling for coliform on time and therefore were in violation of monitoring and reporting requirements. 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 your health was at risk during that time.

MCL Violation

- *We constantly monitor for various contaminants in the water supply to meet all regulatory requirements. Our water system was in violation of federal and state water quality standards for benzene from 1/05 through 7/05. The levels of benzene are shown in the Test Results Table. 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. Our system corrected the violation by replacing our GAC (granular activated carbon) filters.*

Variations & Exemptions

- Any system with a variance or exemption must include:
 - Explanation of the variance or exemption
 - Date that the variance or exemption was issued
 - Brief status report on compliance
 - A notice of opportunity for public input

Variations and Exemptions

The Burnt Cedar Water Disinfection Plant (WDP) is one of a handful of surface water treatment facilities across the nation that are not required to provide filtration for its drinking water. ... the plant treats water pumped from Lake Tahoe, which has been granted an exemption from the filtration requirement because of the unique characteristics and high quality of the water.

The Burnt Cedar WDP meets stringent national water quality standards solely through rigorous watershed management practices, water quality monitoring, and state-of-the-art ozone disinfection.

Requirements

F. Required Educational Information

1. Explanation of contaminants and their presence in drinking water, including bottled water*
2. Warning for vulnerable or immuno-compromised populations about *Cryptosporidium**
3. Informational statements on arsenic, nitrate, lead, and TTHM (if applicable)
4. EPA's Safe Drinking Water Hotline number:
1-800-426-4791

* = text

Deadlines

- April 1 – Wholesale agencies must forward required information to retail agencies.
- July 1 – Community water systems are required to distribute the CCR to customers and the Bureau of Safe Drinking Water (me)
- October 1 – Deadline for submission of proof of distribution to State agency (me again)

Posting your CCR

- CCR is to be distributed to all billing addresses or service connections.
- Systems with greater than 100,000 persons must post CCR on web.

Posting your CCR

Systems serving between 500 and 10,000 people:

- Must publish their Report in one or more local newspapers
- Inform customers directly if their CCR will not be mailed (e.g. a prominent note in their water bill)

- Systems serving fewer than 10,000 but more than 500 people
 - Must publish their Report in one or more local newspapers
 - Inform customers their CCR will not be mailed (e.g. a note in their water bill)
 - Provide information on the availability of the CCR
 - Must make the CCR available to the public upon request

- Systems serving fewer than 500 people
- Must provide notice to their customers of the availability of the Report by:
 - Mail
 - Door to door delivery
 - Posting a notice in a public location (i.e. bulletin board, club house, library, etc.)
 - Must make the CCR available to the public upon request

Posting your CCR

- Small systems (those serving fewer than 10,000 people) may be exempt from automatically mailing their CCR to every customer, but the system must still advertise the availability of the CCR
- Systems must use “good faith” efforts to reach non-bill paying customers

Good faith efforts

- Posting the CCR on the Internet
- Press releases that the CCR is available
- Radio or TV public service announcements
- Paid advertising or legal notices of CCR availability



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CHAMPIONS!**

Contaminants of Concern

- Additional language is required for the contaminants Arsenic, Nitrate, Lead and TTHMs if found at levels above the detection limit but below the maximum contaminant level.

Current informational statement for arsenic levels between 5-10 ppb

- *While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.*

Changes based on the new Arsenic Rule; > 0.010 mg/L (10µg/L)

- Since 2006, health effects language required
- System is out of compliance with the MCL and must provide the following information in its CCR:
 - *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.*
 - 40 CFR 141.154(f) and 141.153(d)(6)

- Educational information for Nitrate levels between 5-10 mg/L
- Educational information for Lead levels above the Action Level in more than 5% but fewer than 10% of the sample sites

Reporting Monitoring Data for

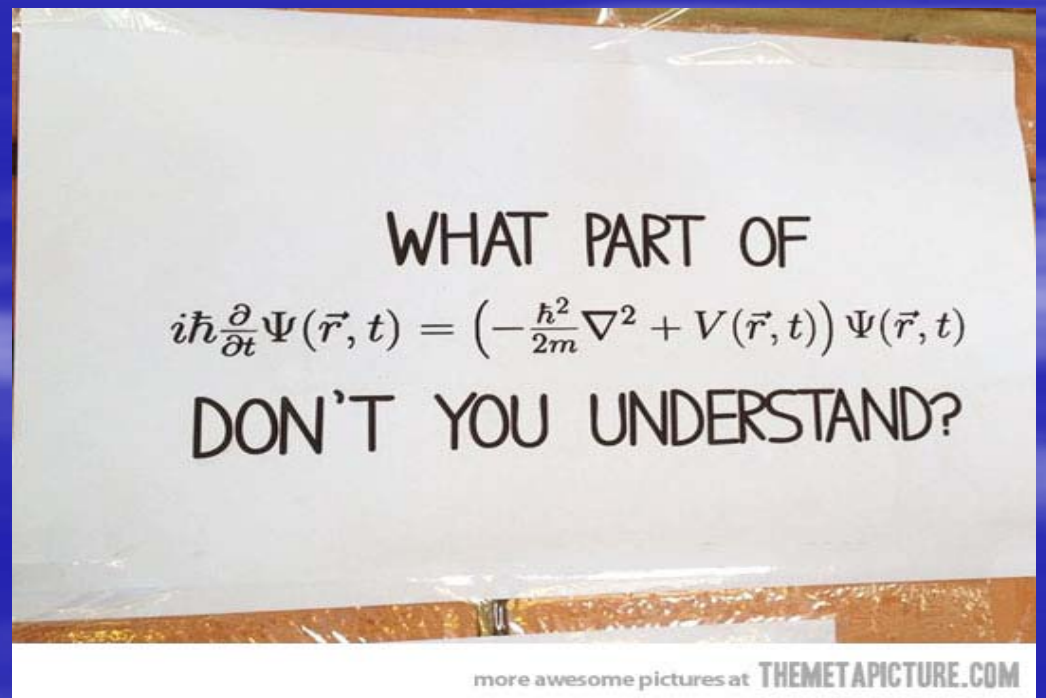
- *E. coli*: systems that test for *E. coli* should report the Total Number of Positive Samples for the year
- Fecal coliform: include the total number of positive samples for the year

How to Report Monitoring Data if Sampling more frequently than annually

- Report Highest Detect and Range, or
- Highest Annual Average and Range of all points

Units of Measurement

- mg/L = Milligrams per liter or ppm = parts per million
- ug/L – Micrograms per liter or ppb = parts per billion
- pCi/L = Picocuries per liter (radioactivity)
- ND = Non Detect
- NA = Non-Applicable



Source Water Assessment

- Every year, CCRs must contain information about the availability of the assessment and how to obtain the Report.
- Must provide brief summaries of their source water's susceptibility to contamination.
- 40 CFR 141.153(b)(2).

Educational statements for vulnerable or immunocompromised individuals

- *Cryptosporidium is a microscopic organism that, if ingested, can cause fever and gastrointestinal symptoms. Crypto is made harmless or removed from water through a successful treatment combination of filtration, sedimentation and disinfection using ultraviolet light and ozone. Our water treatment facilities carefully monitor our water for the presence of this organism.*

Question 1

- How would you report the following?
- Barium <0.002

Answer

- This is a non-detect and the results would not appear on the Table
- DO NOT INCLUDE NON-DETECTS (ND) OR RESULTS WITH <
- EXCEPT FOR ARSENIC, LEAD, COPPER (LCR), AND NITRATES

Question 2

- How would you report the following?
- Arsenic 0.017 ppm

Answer

This is a detect *and* it exceeds the MCL of 10 ppb (0.010 ppm), so it is also a violation

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.

Question 3

- How would you report the following?
- Nitrate 6.1 mg/L

Answer

This is a detect and must be on the Table, and it is greater than 5 mg/L so the educational statement is also required.

Question 4

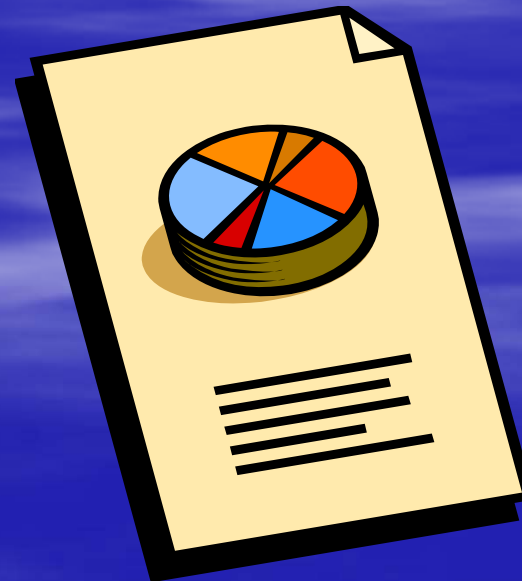
- How would you report the following?
- 90% Copper <0.005 ; System is on reduced 3-year monitoring, last sampled in June 2003

Answer

- This is a non-detect but one of the specific exceptions, thus the results *would* appear on the Table as ND, along with the date sampled
- ALWAYS REPORT LEVELS OF ARSENIC, LEAD, COPPER, NITRATES AND ANY DETECTS

Electronic Delivery

- A CWS needs to ensure delivery to every bill-paying customer, which may require a combination of paper and/or electronic delivery in a service area.



Important Considerations

- If a CWS sends the CCR via email and it receives a message that the email failed to reach the customer (i.e., it bounced back) the CWS should send the CCR by an allowable alternative means.



Electronic Delivery

- Before providing electronic delivery of CCRs to customers, a CWS should conduct public outreach to provide advance notification of the change in delivery approach.

Electronic Delivery

- A CWS mailing a direct URL notification should also consider include a check box on every water bill, similar to a change of address or pay by credit card, in which a customer can elect to receive a paper CCR.



Top 7 Things To Remember

1. Give customers a heads up and an option!

- Inform customers of the change in delivery approach before delivery of the CCRs to customers. Give them a chance to choose if they prefer paper or electronic CCRs.

2. Tell everyone, all the time!

- A CWS mailing a direct URL should include an option on every water bill for a customer to elect to receive a paper CCR.

3. Know your costs!

- May not see savings in the first year, may take a few years for people to be comfortable with e-delivery.



4. Catch customers' attentions!

- Include a short message to encourage readership of the CCR.

5. Make it bold! Make it short!

- The direct URL should be in typeface that is at least as large as the largest type on the statement or other mailing notification.
- A CWS should also create a short, easy to type direct URL.

6. Keep a record!

- Remember customer delivery preferences for future CCR deliveries.

7. Remind auto-pay customers!

- To ensure that electronic bill and auto-pay customers are aware of their CCR, a CWS should send a separate CCR-related email

Questions?

