

# PREPARATION GUIDELINES FOR CONSUMER CONFIDENCE REPORTS

Virginia Department of Health – Office of Drinking Water

Have you started preparing your Consumer Confidence Report for Calendar Year 2021?

## IMPORTANT NOTES:

1. There are **NO** rule changes, and the reporting requirements for the existing rules as in previous years remain unchanged.
2. Any **2021 Unregulated Contaminant Rule 4 (UCMR4)** sampling results from participating waterworks are to be included.
3. The **special monitoring results for sodium** are to be included in the CCR (in accordance with 40 CFR §141.41 and 12VAC5-590-545 C 5 f).

## Important Deadlines to Remember

<b>May 1, 2022</b>	<b>Last day</b> to submit a draft copy of the CCR to your Field Office (FO) if a review is desired before the CCR is distributed. The review may take two to four weeks.
<b>July 1, 2022</b>	<b>Last day</b> to distribute the CCR to customers, and submit a copy to your FO, covering water quality data for calendar year 2021.
<b>October 1, 2022</b>	<b>Last day</b> to send signed certification form to your FO.

## Actions to be taken as a reminder on the Revised Total Coliform Rule (RTCR)

### 1. Health Effects Language (RTCR):

Health effects language for total coliform bacteria is used when assessments are required to be performed. The following health effects language applies to *E. coli*.

- If a Level 1 or Level 2 Assessment is required (not due to an *E. coli* Primary Maximum Contaminant Level (PMCL) violation):

*“Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessments to identify problems and to correct any problems that are found.”*

- If an *E. coli* PMCL violation occurs:

*“E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children, the elderly, and people with severely-compromised immune systems. We found E. coli bacteria, indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.”*

### 2. Reporting Changes:

There are **NO** reporting changes, except that the number of total coliform positives is no longer required in the “detects” table. However, the total number of positive *E. coli* samples must be reported in the “detects” table of contaminants (see below).

❖ **COMPLETING THE “DETECTS” TABLE**

- The detection of *E. coli* whether or not it is associated with an *E. coli* PMCL violation must be included in the “detects” table of contaminants. Detection *E. coli* but NO *E. coli* PMCL violation (optional text by the waterworks owner).

*If a waterworks detects E. coli and has not violated the E. coli PMCL, the waterworks owner must complete the “detects” table in the CCR, and may include a statement that explains that although they have detected E. coli, they are not in violation of the E. coli PMCL.*

- All other detects on the other rules are to be reported in the same manner as has been done in previous years.

❖ **REPORTING ON ASSESSMENTS NOT INVOLVING AN *E. coli* PMCL VIOLATION**

For a waterworks required to complete a Level 1 or a Level 2 assessment that is NOT due to an *E. coli* PMCL violation, the CCR must include the specific text for the following:

▪ **Presence of coliforms**

*Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessments to identify problems and to correct any problems that are found.*

▪ **Activity associated with a Level 1 assessment (fill-in-the-blank)**

*During the past year, we were required to conduct (\_\_\_\_insert the number of Level 1 assessments) Level 1 assessments. (\_\_\_\_insert the number of Level 1 assessments) Level 1 assessments were completed. In addition, we were required to take (\_\_\_\_insert the number of corrective actions) corrective actions and we completed (\_\_\_\_insert the number of corrective actions) of these actions.*

▪ **Activity associated with a Level 2 assessment (fill-in-the-blank)**

*During the past year (\_\_\_\_insert the number of Level 2 assessments) Level 2 assessments were required to be completed for our waterworks. (\_\_\_\_insert the number of Level 2 assessments) Level 2 assessments were completed. In addition, we were required to take (\_\_\_\_insert the number of corrective actions) corrective actions and we completed (\_\_\_\_insert the number of corrective actions) of these actions.*

▪ **Waterworks failure to complete all required activities**

Any owner who failed to complete all of the required assessments or correct all identified sanitary defects shall also include one or both of the following statements in the CCR, as appropriate:

*a. During the past year, we failed to conduct all of the required assessments.*

*b. During the past year, we failed to correct all identified sanitary defects that were found during the assessments.*

❖ **REPORTING ON ASSESSMENTS INVOLVING AN *E. coli* PMCL VIOLATION**

For a waterworks required to complete a Level 2 assessment due to an *E. coli* PMCL violation, the CCR must include the specific text for the following:

▪ **Presence of *E. coli***

*E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children, the elderly, and people with severely compromised immune systems. We found E. coli, indicating the*

*need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessments to identify problems and to correct any problems that are found.*

▪ **Activity associated with a Level 2 assessment (fill-in-the-blank)**

*We were required to complete a Level 2 assessment because we found *E. coli* in our waterworks. In addition, we were required to take (\_\_\_\_insert number of corrective actions) corrective actions and we completed (\_\_\_\_insert number of corrective actions) of these actions.*

▪ **Waterworks failure to complete all required activities**

Any owner who failed to complete all the required assessment or correct all identified sanitary defects shall also include one or both of the following statements in the CCR, as appropriate:

*a. We failed to conduct the required assessment.*

*b. We failed to correct all sanitary defects that were identified during the assessment that we conducted.*

▪ **Detection of *E. coli* and incurring an *E. coli* PMCL violation**

If a waterworks detects *E. coli* and has violated the *E. coli* PMCL, the waterworks owner must complete the “detects” table in the CCR, and shall include one or more of the following statements to describe any noncompliance, as applicable:

*a. We had an *E. coli*-positive repeat sample following a total coliform-positive routine sample.*

*b. We had a total coliform-positive repeat sample following an *E. coli*-positive routine sample.*

*c. We failed to take all the required repeat samples following an *E. coli*-positive routine sample.*

*d. We failed to test for *E. coli* when any repeat sample tested positive for total coliform.*

**General information**

- CCR must be mailed or directly delivered to all customers who receive a water bill, and a “good faith” effort must be made to reach other consumers who do not receive a water bill. Electronic delivery methods are allowed, and a separate summary/explanation is available from your FO.
- A copy of the CCR must be sent to your FO at the same time it is distributed to the customers, and a copy must be given to anyone who requests it.
- Waterworks serving fewer than 10,000 persons may publish the CCR in a local newspaper instead of mailing or direct delivery. The customers must be informed that the CCR will not be mailed, and a copy of the CCR will be made available to the public upon request.
- Waterworks owners should already have all the necessary information to complete the CCR. Contact your FO for any desired assistance.

**Table of detected contaminants**

- All regulated contaminants (as listed in Section 12VAC5-590-546 of the *Waterworks Regulations*; effective June 23, 2021) detected in compliance samples collected in calendar year 2021 must be listed in a specific manner. Pay close attention to unique reporting requirements for finished water turbidities (applies to surface water sources), distribution system coliform bacteria and treatment technique triggers, and tap sample lead and copper results.
- The likely source of each detected contaminant must be included, using the best information available from the list of sources in Section 12VAC5-590-546, Table 546.1. Contact your FO or use this link:

<https://www.vdh.virginia.gov/drinking-water/office-of-drinking-water/consumer-confidence-reports/>

- Any waterworks participating in the UCMR4 program for which sampling results were received for samples collected in 2021 must include these results in the CCR.
- If compliance samples were not collected in 2021, then the most recent results from compliance samples collected in calendar years 2017 through 2020 must be used. Do not use any sample results before 2017.

- Total organic carbon (TOC) must be listed as a treatment technique (TT) by surface water systems if it was detected in the raw and finished water. Actual TOC concentrations and removal ratios do not have to be listed.
- Owners may want to include a brief statement at the end of the table to explain that many other contaminants were analyzed but were not detected. Otherwise, customers may think that no samples were collected. For example, if coliform bacteria were not detected during the entire year, it may be important to mention that.
- Listing of contaminants that were not detected or are not regulated is allowed, but the sample results should be placed in a separate table. Non-regulated contaminants include such things as iron, manganese, pH, hardness, alkalinity, MTBE, sodium and many others (contact your FO for more info). Owners may want to briefly mention these non-detected or non-regulated contaminants if customers may have a special interest in them.
- Although sodium is not regulated, owners are required to report the levels detected. Report sodium along with other unregulated or undetected contaminants.
- Consecutive (or secondary) waterworks must include all regulated contaminants detected in compliance samples collected in its own distribution system and regulated contaminants detected by the primary system (or wholesaler) at its water treatment plant(s) and entry point(s). Contact the primary system to obtain the necessary compliance results that pertain to the secondary system.

#### Arsenic

If arsenic was detected at a level greater than 5 ppb but less than or equal to 10 ppb in the most recent compliance sample collected in 2017-2021 time period, the following educational information must be included. This is in addition to the required information in the table of detected contaminants.

*“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.”*

#### Cryptosporidium

If any monitoring performed during 2021 indicated cryptosporidium may be present in the raw or finished water, a summary and explanation of the results must be included.

#### Groundwater Systems

Special information must be included if the following conditions occurred (contact your FO for more details):

- A significant deficiency identified by the state during a sanitary survey remains uncorrected.
- A source water sample (triggered sample or an additional sample following a triggered sample) indicated the presence of fecal coliform or *E. coli*.

#### Violations

Each violation for monitoring, reporting, PMCL, maximum residual disinfectant level, and treatment technique (TT) that occurred in 2021 must be explained by describing the length of the violation, potential adverse health effects, and corrective actions taken. If a violation from an earlier year is carried over into 2021, it also must be reported. This is in addition to the information that must be included in the table of detected contaminants when an MCL or TT violation has occurred.

#### Required additional health information for lead

The following language is mandatory for every waterworks regardless of the lead compliance sample results:

*“If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. [Insert name of waterworks] is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can*

*minimize the potential for lead exposure by flushing your tap for 30 seconds to two minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (800-426-4791) or at <http://www.epa.gov/safewater/lead>.”*

Other information and suggestions to improve the CCR

- Provide the required location information on drinking water source(s) in very general terms. Due to security concerns, avoid including a detailed map or verbal location description.
- Include the same (or updated) source water assessment information as in all previous CCRs, plus any additional source water assessment information given to you by your FO for new sources recently placed into service.
- Include the same mandatory language required in all previous CCRs addressing vulnerable populations and contaminants reasonably expected to be in drinking water.
- Consider including information about planned water system improvements or water quality issues customers have expressed concern about.
- Waterworks have the option of using the EPA’s Web-based program, CCRiWriter, to prepare the CCR, or they may continue to use the existing formats of prior years. The CCRiWriter is available at:

[https://ofmpub.epa.gov/apex/safewater/f?p=140:LOGIN\\_DESKTOP](https://ofmpub.epa.gov/apex/safewater/f?p=140:LOGIN_DESKTOP)

It requires registration to the site, and a username and a password to login.