

2022 Consumer Confidence Report (CCR) Certification Form

Water System Name: _____

Water System No.: NC _____ Report Year: _____ Population Served: _____

The Community Water System (CWS) named above hereby confirms that all provisions under 40 CFR parts 141 and 142 requiring the development of, distribution of, and notification of a consumer confidence report have been executed. Further, the CWS certifies the information contained in the report is correct and consistent with the compliance monitoring data previously submitted to the primacy agency by their NC certified laboratory. In addition, if this report is being used to meet Tier 3 Public Notification requirements, as denoted by the checked box below, the CWS certifies that public notification has been provided to its consumers in accordance with the requirements of 40 CFR 141.204(d).

Certified by: Name: _____

Title: _____

Signature: _____

Phone #: _____

Delivery Achieved Date: _____

Date Reported to State: _____

The CCR includes the mandated Tier 3 Public Notice for a monitoring/reporting violation (check box, if yes).

Check **all** methods used for distribution (see instructions on back for delivery requirements and methods):

- Paper copy to all US Mail Hand Delivery
- Notification of availability of paper copy (Provide a copy of the notice.)
Notification Method _____ (i.e., US Mail, door hanger)
- Notification of CCR URL (must be direct URL): _____
Notification Method _____ (i.e., on bill, bill stuffer, separate mailing, email)
- Direct email delivery of CCR Attached Embedded
Notification Method _____ (i.e., on bill, bill stuffer, separate mailing)
- Newspaper (attach copy) Name of Paper? _____ Date Published: _____
Notification Method _____ (i.e., on bill, bill stuffer, separate mailing, email)

“Good faith” efforts (in addition to one of the above required methods) were used to reach non-bill paying consumers such as industry employees, apartment tenants, etc. Extra efforts included the following methods:

- posting the CCR on the Internet at URL: _____
- mailing the CCR to postal patrons within the service area
- advertising the availability of the CCR in news media (attach copy of announcement)
- publication of the CCR in local newspaper (attach copy of newspaper)
- posting the CCR in public places such as: (attach list if needed) _____
- delivering multiple copies to single bill addresses serving several persons such as: apartments, businesses, and large private employers
- delivery to community organizations such as: (attach list if needed) _____

Note: Use of social media (e.g., Twitter or Facebook) or automated phone calls DO NOT meet existing CCR distribution methods under the Rule.

INSTRUCTIONS for Water System (Remove this page prior to distribution.)

1. Create your 2022 CCR using the template and instructions on the following pages

- **Make sure all instructions are removed when report is complete.** Instructions are in blue text with ** symbols at the beginning of each paragraph. The **s are included in case the blue color is not visible.
- Systems that have a large proportion of non-English speaking customers must include information in the appropriate language(s) regarding the importance of the report or provide 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.
- It is best to remove all non-detected contaminants and all contaminants not required to be monitored by the water system from the report. This will make the report shorter, so that it is easier to read and less expensive to print. If you wish to include non-detected contaminants in your report, the CCR Rule requires that all detected and non-detected contaminants be presented in separate tables.
- A detected contaminant stays in the report from year to year until the particular contaminant is tested again, in which case, the result may either be modified, if detected again, or removed, if not detected. No data older than 5 years needs to be included.

2. Distribute your 2022 CCR to customers through direct delivery

CCR DELIVERY METHOD	METHOD DESCRIPTION (Click link: EPA-CCR Rule Delivery Options Memo January 3, 2013 . for referenced Appendix Figures below.)
Mail – paper copy	CWS mails a paper copy of the CCR to each bill-paying customer.
Mail – notification that CCR is available on web site via a direct URL	CWS mails to each bill-paying customer a notification that the CCR is available and provides a direct URL to the CCR on a publicly available site on the Internet where it can be viewed. A URL that navigates to a web page that requires a customer to search for the CCR or enter other information does not meet the “directly deliver” requirement. The mail method for the notification may be, but is not limited to, a water bill insert, statement on the water bill or community newsletter. See Figure 1 in the Appendix. A copy of the notice of the direct URL must be submitted to the State with the CCR and Certification Form.
Email – direct URL to CCR	CWS emails to each bill-paying customer a notification that the CCR is available and provides a direct URL to the CCR on a publicly available site on the Internet. A URL that navigates to a web page that requires a customer to search for the CCR or enter other information does not meet the “directly deliver” requirement. This method may only be used for customers when a CWS has a valid email address to deliver the CCR electronically. See Figure 2 in the Appendix. A copy of the email must be submitted to the State with the CCR and Certification Form.
Email – CCR sent as an attachment to email	CWS emails the CCR as an electronic file email attachment [e.g., portable document format (PDF)]. This method may only be used for customers when a CWS has a valid email address to deliver the CCR electronically. See Figure 3 in the Appendix. A copy of the email must be submitted to the State with the CCR and Certification Form.
Email – CCR sent as an embedded image in an email	CWS emails the CCR text and tables inserted into the body of an email (not as an attachment.) This method may only be used for customers when a CWS has a valid email address to deliver the CCR electronically. See Figure 4 in the Appendix. A copy of the email must be submitted to the State with the CCR and Certification Form.
Additional electronic delivery that meets “otherwise directly deliver” requirement	CWS delivers CCR through a method that “otherwise directly delivers” to each bill-paying customer and in coordination with the primacy agency. This category is intended to encompass methods or technologies not included above. CWSs and primacy agencies considering new methods or technologies should consult with the EPA to ensure it meets the intent of “otherwise directly deliver.”

- **Systems serving 100,000 or more persons must** post the CCR on a publicly accessible Internet site using a direct URL.
- **Systems serving 10,000 or more persons must** distribute the CCR using a delivery method in the table above.
- **Systems serving less than 10,000 persons but more than 500 persons must either:** (1) distribute the CCR using a delivery method in the table above **OR** (2) notify their customers that the CCR is not being mailed, but it will be in what newspaper(s) and when (attach copy of notice). The complete CCR should be printed in the local newspaper, and a copy of the CCR must be made available upon request. *(The 2nd option is not acceptable if using the CCR for Tier 3 Public Notification!)*
- **Systems serving 500 or fewer persons must either:** (1) distribute the CCR using a delivery method in the table above **OR** (2) notify their customers that the CCR is not being mailed, and a copy of the CCR must be made available upon request. *(The 2nd option is not acceptable if using the CCR for Tier 3 Public Notification!)* A copy of the notice must be submitted to the State with the CCR and Certification Form.

Note: Use of social media or automated phone calls DO NOT meet existing CCR distribution methods under the Rule.

3. Submit and certify a copy of the CCR and all supporting documentation (copy of notice, email, or bill example) through our ECERT Online Certification application in one PDF file

ECERT Online Certification and Submittal of CCR: <https://pws.ncwater.org/ECERT/pages/default.aspx>

The certification form on the previous page is not required for CCRs submitted through ECERT. For assistance with accessing ECERT please email PWSS.CCR@ncdenr.gov or go to <https://pws.ncwater.org/ECERT/pages/CCRHELP.pdf>

If you do not have access to the internet, you can mail your CCR, Certification form, and supporting documentation to: *Public Water Supply Section, 1634 Mail Service Center, Raleigh, NC 27699-1634, Attn: CCR Rule Manager* or FAX your CCR, Certification form, and supporting documentation to (919) 715-6637, *Attn: CCR Rule Manager*

****Special Instructions for Systems Serving 500 or Fewer Persons**

****Systems that serve 500 or fewer customers do not need to directly deliver their CCR if they instead deliver a notice of availability to all customers that explains how they can obtain a copy. This is not an acceptable method if the CCR is being used to deliver a tier 3 public notice.**

****The notice could include the name and contact details of who customers should request a copy of the CCR from or it could include a direct URL to view the CCR if the report has been posted online. Examples of these are included below. The notice of availability must be directly delivered to each customer which can be done by mail, hand delivery, or including it with water bills.**

****When submitting your CCR to the State, you must include a copy of the notice of availability along with the full CCR report if this distribution method is used.**

****Example Notice of Availability:**

****The Annual Drinking Water Quality Report for 2022 will not be distributed to each customer, but a copy is available upon request. Contact your water system representative, [insert Name] at [insert phone number with area code].**

****Note:** Water systems should provide a translation of this statement if >10 percent of the population served is non-English speaking. Here is a translation of the above example:

****El Informe Anual de Calidad de Agua Potable (Informe de Confianza del Consumidor) del año [YEAR] no se distribuirá a cada cliente, pero puede obtener una copia si la pide. Contacte al representante de su compañía de agua,[insert Name] al [insert phone number with area code] para pedir una copia .**

****Example Notice of Direct URL:**

****The Annual Drinking Water Quality Report for 2022 will not be distributed to each customer, but the report can be viewed on our website at the following link: [insert link, ex. www.yourwater.org/ccr]**

****Note:** Water systems should provide a translation of this statement if >10 percent of the population served is non-English speaking. Here is a translation of the above example:

****El Informe Anual de Calidad de Agua Potable (Informe de Confianza del Consumidor) del año [YEAR] no se distribuirá a cada cliente, pero puede ver el Informe en nuestra página electrónica en el enlace siguiente: [insert link, ex. www.yourwater.org/ccr]**

****Special Instructions for Systems that purchase water from another water system**

**Water systems that purchase treated water from another water system are required to include information from their wholesalers CCR in their own CCR. If you purchase from multiple systems, then you must include this information for each of the systems that you purchase from.

**Here are a couple options for including this information in your CCR:

1. Follow the CCR Template, including the selling systems source and SWAP information in your report, and at the end of the report attach the pages from your sellers CCR that show all their data tables and any violations they received. Make sure that the attached pages are clearly labeled to show which water system they belong to.
2. If the selling system posted their CCR on the internet, you can provide the direct URL to their CCR in your report. For example, in the section titled "when you turn on the tap, consider the source," you could add the following: "We purchase treated water from [XYZ Water System], and their annual report can be viewed at [XYZwatersystem.org/CCR]"

****Note:** Systems that sell water to another water system, are required to provide a copy of their CCR to the systems that purchase from them by April 1st so that the purchase systems will be able to meet the July 1st CCR deadline. Purchasing and selling systems should coordinate with each other to confirm when the CCR information will be delivered to the purchasing systems.

****2022 Consumer Confidence Report (CCR) Template (revised 12/2022)**

2022 Annual Drinking Water Quality Report

“System Name”

Water System Number: **“99-99-999”**

****The report must include the telephone number of the owner, operator, or designee of the water system as a source of additional information concerning the report. If there are meetings for opportunities for public participation in decisions that may affect the quality of the water, the time and place of these meetings must be included.**

****Suggested Introduction:**

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

We are pleased to present to you this year's Annual Drinking Water Quality Report. This report is a snapshot of last year's water quality. Included are details about your source(s) of water, what it contains, and how it compares to standards set by regulatory agencies. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water and to providing you with this information because informed customers are our best allies. **If you have any questions about this report or concerning your water, please contact [name of water system contact] at [(999) 999-9999]. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held at [location/dates/time].**

What EPA Wants You to Know

****Paragraphs 1, 2 & 3 below MUST remain as is, including the required lead health effects language that each system is required to include per the revisions to the Lead and Copper and CCR Rules.**

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).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

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. [Name of Utility] 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 2 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 or at <http://www.epa.gov/safewater/lead>.

****Paragraphs 4 and 5 must remain, but they may be modified.**

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 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, 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; and 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. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

When You Turn on Your Tap, Consider the Source

**This annual report must provide information on the source(s) of water which includes the type of water [such as ground, surface, purchase surface, ground water under the direct influence of surface water (GWUDI), etc]; the commonly used name (if any), and the location of the source(s). This includes water that is purchased from another water system. If you purchase water from another water system that posted their CCR on the internet, you can also include the direct URL to their CCR here instead of including their tables of detected contaminants later in this report.

The water that is used by this system is ... and is located at ...

Source Water Assessment Program (SWAP) Results

** Source water assessments are available for all North Carolina public water systems and are periodically updated. All four paragraphs in this section must remain, but they may be modified.

The North Carolina Department of Environmental Quality (DEQ), Public Water Supply (PWS) Section, Source Water Assessment Program (SWAP) conducted assessments for all drinking water sources across North Carolina. The purpose of the assessments was to determine the susceptibility of each drinking water source (well or surface water intake) to Potential Contaminant Sources (PCSs). The results of the assessment are available in SWAP Assessment Reports that include maps, background information and a relative susceptibility rating of Higher, Moderate or Lower.

The relative susceptibility rating of each source for [SYSTEM NAME] was determined by combining the contaminant rating (number and location of PCSs within the assessment area) and the inherent vulnerability rating (i.e., characteristics or existing conditions of the well or watershed and its delineated assessment area). The assessment findings are summarized in the table below:

** fill out the table below using the SWAP report(s) found at <https://www.ncwater.org/?page=600>: Enter your water system's source(s) under the Source Name column, your source(s)' Susceptibility Rating from Table 2 found in your water system's SWAP report under the Susceptibility Rating column, and the date of the report (found in the footer of each page of your SWAP report) under the SWAP Report Date column. Add or remove rows from the table below, as needed.

Susceptibility of Sources to Potential Contaminant Sources (PCSs)

Source Name	Susceptibility Rating	SWAP Report Date
Well # 1	Lower	September 2021
Well #2	Higher	September 2021
Well #3	Moderate	September 2021

The complete SWAP Assessment report for [SYSTEM NAME] may be viewed on the Web at: <https://www.ncwater.org/?page=600>
Note that because SWAP results and reports are periodically updated by the PWS Section, the results available on this web site may differ from the results that were available at the time this CCR was prepared. If you are unable to access your SWAP report on the web, you may mail a written request for a printed copy to: Source Water Assessment Program – Report Request, 1634 Mail Service Center, Raleigh, NC 27699-1634, or email requests to swap@ncdenr.gov. Please indicate your system name, number, and provide your name, mailing address and phone number. If you have any questions about the SWAP report please contact the Source Water Assessment staff by phone at 919-707-9098.

It is important to understand that a susceptibility rating of “higher” does not imply poor water quality, only the system's potential to become contaminated by PCSs in the assessment area.

Help Protect Your Source Water

** Water systems are encouraged to use this report to inform consumers of source water protection actions that are in the planning stages or are already in place, to invite public participation in locally based source water protection efforts, and to provide tips on ways they can protect their source water. See paragraph below for suggested content.

Protection of drinking water is everyone's responsibility. We have implemented the following source water protection actions: You can help protect your community's drinking water source(s) in several ways: (examples: dispose of chemicals properly; take used motor oil to a recycling center, volunteer in your community to participate in group efforts to protect your source, etc.).

Violations that Your Water System Received for the Report Year

****If the water system received any violation during any compliance period(s) ending by the end of the report year, the report must include a clear and readily understandable explanation of the violation(s) including: length of the violation(s), steps taken by the water system to correct the violation(s), and any potential adverse health effects if a violation was a Maximum Contaminant Level (MCL) violation (also known as a Tier 1 or Tier 2 violation). This included violations that have been resolved and violations that a separate notice has already been delivered for. Adverse health effects are found in Appendix A of the CCR Rule.**

During 2022, or during any compliance period that ended in 2022, we received a *[insert type]* violation that covered the time period of *[insert compliance period]*. We are/have *[insert information on corrective action]* to assure this does not happen again.

Note that certain Treatment Technique (TT) violations also require specific language for potential adverse health effects [see 141.153(f)(2 through 4) of the CCR Rule]. Complete the table below for any Treatment Technique violations. You may want to use the table format for other violations, as well. Any administrative orders or penalties should also be mentioned. You are not required to explain any reporting violations that may have occurred during the report year. TT violations are either Tier 1 or Tier 2 violations and the mandatory public notice must be performed within 24 hours or 30 days (respectively) of the awareness date of the violation.

Treatment Technique Violations

TT Violation	Explanation	Length of Violation	Steps Taken to Correct the Violation	Health Effects Language

****Public Notification (PN):** If the water system chooses to use the CCR for distribution of Tier 3 violation Public Notice(s), the water system does not have to mention the particular violation in this area of the report but must either complete the proper information in the Tier 3 Notice to the Public below or attach a copy of the Notice to the Public on a separate sheet of paper to meet the PN requirements. ***You are required to check the box by your signature on the CCR Certification form to indicate that a Public Notice is included in the CCR and submit the report to both the PN and CCR modules in ECERT.*** **Note:** Those systems using the CCR mailing waiver option that allows only notification to customers of the availability of the CCR cannot use the CCR for distribution of the Public Notice(s) because Public Notice(s) must be delivered to all customers.

**** Use of the CCR for primary distribution of a Tier 1 or Tier 2 violation is not allowed since the Public Notification Rule requires that Tier 1 and Tier 2 notices be directly delivered within 24 hours or 30 days (respectively) of the awareness date of the violation.**

NOTICE TO THE PUBLIC

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Violation Awareness Date: _____

*We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During the compliance period specified in the table below, we [*did not monitor or test*] or [*did not complete all monitoring or testing*] for the contaminants listed and therefore cannot be sure of the quality of your drinking water during that time.*

CONTAMINANT GROUP**	FACILITY ID NO./ SAMPLE POINT ID	COMPLIANCE PERIOD BEGIN DATE	NUMBER OF SAMPLES/ SAMPLING FREQUENCY	WHEN SAMPLES WERE TAKEN (Returned to Compliance)

**Delete the contaminant listings below that do not apply to your violations.

(AS) Asbestos - includes testing for Chrysotile, Amphibole and Total Asbestos.

(BA) Total Coliform Bacteria – includes testing for Total Coliform bacteria and Fecal/*E.coli* bacteria. Testing for Fecal/*E.coli* bacteria is required if total coliform is present in the sample.

(BB) Bromate/Bromide – includes testing for Bromate and/or Bromide.

(CD) Chlorine Dioxide/Chlorite – includes testing for Chlorine Dioxide and/or Chlorite.

(DI) Disinfectant Residual must be tested with the collection of each compliance bacteriological sample, at the same time and site.

Fecal Indicators – includes *E.coli*, enterococci or coliphage.

(HAA5)- Haloacetic Acids - include Monochloroacetic Acid, Dichloroacetic Acid, Trichloroacetic Acid, Monobromoacetic Acid, Dibromoacetic Acid.

(IOC) Inorganic chemicals - include Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cyanide, Fluoride, Iron, Manganese, Mercury, Nickel, pH, Selenium, Sodium, Sulfate, and Thallium.

(LC) Lead and Copper are tested by collecting the required number of samples and testing each of the samples for both lead and copper.

(NT) Nitrate/ (NI) Nitrite – includes testing for nitrate and/or nitrite.

(RA) Radionuclides - includes Gross Alpha, Radon, Uranium, Combined Radium, Radium 226, Radium 228, Potassium 40 (Total), Gross Beta, Tritium, Strontium 89, Strontium 90, Iodine 131, and Cesium 134.

(SOC) – Synthetic Organic Chemicals/Pesticides – include 2,4-D, 2,4,5-TP (Silvex), Alachlor, Atrazine, Benzo(a)pyrene, Carbofuran, Chlordane, Dalapon, Di(2-ethylhexyl)adipate, Di(2-ethylhexyl)phthalate, Dibromochloropropane (DBCP), Dinoseb, Endrin, Ethylene dibromide (EDB), Heptachlor, Heptachlor Epoxide, Hexachlorobenzene, Hexachlorocyclopentadiene, Lindane, Methoxychlor, Oxamyl(vydate), PCBs, Pentachlorophenol, Picloram, Simazine, Toxaphene.

(TOC) - Total Organic Carbon - includes testing for Alkalinity, Dissolved Organic Carbon (DOC), Total Organic Carbon (TOC) and Ultraviolet Absorption 254 (UV254). Source water samples must be tested for both TOC and Alkalinity. Treated water samples must be tested for TOC. Source water samples and treated water samples must be collected on the same day.

(TTHM) - Total Trihalomethanes - include Chloroform, Bromoform, Bromodichloromethane, and Dibromochloromethane.

(VOC) - Volatile Organic Chemicals - include 1,2,4-Trichlorobenzene, Cis-1,2-Dichloroethylene, Xylenes (Total), Dichloromethane, o-Dichlorobenzene, p-Dichlorobenzene, Vinyl Chloride, 1,1,-Dichloroethylene, Trans-1,2,-Dichloroethylene, 1,2-Dichloroethane, 1,1,1-Trichloroethane, Carbon Tetrachloride, 1,2-Dichloropropane, Trichloroethylene, 1,1,2-Trichloroethane, Tetrachloroethylene, Chlorobenzene, Benzene, Toluene, Ethylbenzene, and Styrene.

(WQP) Water Quality Parameters (for Lead and Copper Rule) - includes Calcium, Orthophosphate (as PO₄), Silica, Conductivity, pH, Alkalinity and Water Temperature.

What should I do? There is nothing you need to do at this time.

What is being done? [Describe corrective action.]

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

For more information about this violation, please contact the responsible person listed in the first paragraph of this report.

Important Drinking Water Definitions:

**Some definitions below may be removed from the report if not needed. Different bullet points are used to show which definitions can be removed and which must stay:

- ****Suggested definitions for the report - remove the definitions that are not needed.**
- ****Definitions that must stay in the report, if any are used in the table(s) of detected contaminants--remove any definitions not needed/required.**
- ****Definitions that MUST stay in the report.**

- ***Not-Applicable (N/A)*** – Information not applicable/not required for that particular water system or for that particular rule.
- ***Non-Detects (ND)*** - Laboratory analysis indicates that the contaminant is not present at the level of detection set for the particular methodology used.
- ***Parts per million (ppm) or Milligrams per liter (mg/L)*** - One part per million corresponds to one minute in two years or a single penny in \$10,000.
- ***Parts per billion (ppb) or Micrograms per liter (ug/L)*** - One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
- ***Parts per trillion (ppt) or Nanograms per liter (nanograms/L)*** - One part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.
- ***Parts per quadrillion (ppq) or Picograms per liter (picograms/L)*** - One part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000,000.
- ***Picocuries per liter (pCi/L)*** - Picocuries per liter is a measure of the radioactivity in water.
- ***Million Fibers per Liter (MFL)*** - Million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.
- ***Nephelometric Turbidity Unit (NTU)*** - Nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
- ***Variances and Exceptions*** – State or EPA permission not to meet an MCL or Treatment Technique under certain conditions.
- ***Action Level (AL)*** - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- ***Treatment Technique (TT)*** - A required process intended to reduce the level of a contaminant in drinking water.
- ***Maximum Residual Disinfection Level (MRDL)*** – The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- ***Maximum Residual Disinfection Level Goal (MRDLG)*** – The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- ***Locational Running Annual Average (LRAA)*** – The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters under the Stage 2 Disinfectants and Disinfection Byproducts Rule.
- ***Running Annual Average (RAA)*** – The average of sample analytical results for samples taken during the previous four calendar quarters.
- ***Level 1 Assessment*** - *A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.*
- ***Level 2 Assessment*** - *A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.*

- **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.

Water Quality Data Tables of Detected Contaminants

We routinely monitor for over 150 contaminants in your drinking water according to Federal and State laws. The tables below list all the drinking water contaminants that we detected in the last round of sampling for each particular contaminant group. The presence of contaminants does not necessarily indicate that water poses a health risk. **Unless otherwise noted, the data presented in this table is from testing done January 1 through December 31, 2022.** The EPA and the State allow 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.

****Note:** Where a system is allowed to monitor for regulated contaminants less often than once a year, the table(s) must include the date and detectable results of the most recent samples, and the report must include a brief statement indicating that the data presented in the report are from the most recent monitoring performed in accordance with the regulations. No data older than 5 years need to be included.

****For systems that purchase water from another water system:** You must include the data tables of detected contaminants from the system(s) you purchase from in addition to the data tables for your system. This can be done by (1) Including a link to the sellers CCR with instructions to view the results at that link, (2) Including tables for the seller system(s) in this section and clearly labeling which system each data table is for, or (3) Attach the data tables from the sellers CCR to the end of the report making sure it is clear what system those results are for. Consider coordinating with the seller to consolidate all purchase systems into their CCR.

****The tables below, as well as Appendix A of the CCR Rule, indicate which unit of measurement must be used in the report. Do NOT change the unit of measurements in the tables below. Clear highlighting/denotation of any contaminant detected in violation of a MCL, MRDL or TT, or exceeding an AL should be indicated in the tables (i.e., different color, larger or bolder font, etc.).**

****If the operator is aware of any specific likely sources of contamination for the contaminants listed in these tables, this information must be included in the “likely source of contamination” column.**

REVISED TOTAL COLIFORM RULE:

****Water systems with one or more *E. Coli* positive sample result must include the following table with the total number of positive samples. Remove this table if not applicable.**

Microbiological Contaminants in the Distribution System

Contaminant (units)	MCL Violation Y/N	Number of Positive/Present Samples	MCLG	MCL	Likely Source of Contamination
Total Coliform Bacteria (presence or absence)	N/A	N/A	N/A	TT*	Naturally present in the environment
<i>E. coli</i> (presence or absence)			0	Routine and repeat samples are total coliform-positive and either is <i>E. coli</i> -positive or system fails to take repeat samples following <i>E. coli</i> -positive routine sample or system fails to analyze total coliform-positive repeat sample for <i>E. coli</i> <u>Note:</u> If either an original routine sample and/or its repeat samples(s) are <i>E. coli</i> positive, a Tier 1 violation exists.	Human and animal fecal waste

****If the above table is included, you must include one of the statements below. Include the statement that matches the number of samples your system is required to collect and remove the one that is not applicable.**

* If a system collecting fewer than 40 samples per month has two or more positive samples in one month, an assessment is required.

* If a system collecting 40 or more samples per month finds greater than 5% of monthly samples are positive in one month, an assessment is required.

****If any samples collected during 2022 tested positive for *E. Coli*, the following statement must be included:**

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.

****If *E. coli* was detected during 2022 and the *E. coli* MCL was violated, one or more of the following statements must be included to describe the noncompliance, as applicable:**

- We had an *E. coli*-positive repeat sample following a total coliform-positive routine sample.
- We had a total coliform-positive repeat sample following an *E. coli*-positive routine sample.
- We failed to take all required repeat samples following an *E. coli*-positive routine sample.
- We failed to test for *E. coli* when any repeat sample tests positive for total coliform.

****If *E. coli* was detected during 2022 but there was not an *E. coli* MCL violation you must either: include one or more of the above statements, as applicable, or include a statement that explains although *E. coli* was detected, this was not a violation of the *E. coli* MCL.**

****If a Level 1 or 2 Assessment was required in 2022 not due to an *E. Coli* MCL violation, you must include the following (this language cannot be modified, but one or both of the last two sentences should be removed if not applicable. The appropriate numbers must be inserted.):**

Required Assessments not due to an *E. Coli* MCL 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 assessment(s) to identify problems and to correct any problems that were found during these assessments. During the past year we were required to conduct [INSERT NUMBER OF LEVEL 1 ASSESSMENTS] Level 1 assessment(s). [INSERT NUMBER OF LEVEL 1 ASSESSMENTS] Level 1 assessment(s) were completed. 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. During the past year [INSERT NUMBER OF LEVEL 2 ASSESSMENTS] Level 2 assessments were required to be completed for our water system. [INSERT NUMBER OF LEVEL 2 ASSESSMENTS] Level 2 assessments were completed. 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. During the past year we failed to conduct all of the required assessment(s). During the past year we failed to correct all identified defects that were found during the assessment.

****If a Level 2 Assessment was required in 2022 due to an *E. Coli* MCL violation, you must include the following (this language cannot be modified, but one or both of the last two sentences should be removed if not applicable. The appropriate numbers must be inserted.):**

Required Assessment due to an *E. Coli* MCL Violation

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. We were required to complete a Level 2 assessment because we found *E. coli* in our water system. 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. We failed to conduct the required assessment. We failed to correct all sanitary defects that were identified during the assessment that we conducted.

****For water systems required to comply with the Ground Water Rule (Subpart S):**

(Remove the table and the Significant Deficiency Explanation information below, if not applicable)

Any ground water system that receives notice from the State of a significant deficiency or notice from a laboratory of a fecal indicator (*E.coli*, *enterococci* or coliphage) -positive ground water source sample must inform its customers of any significant deficiency that is uncorrected at the time of the next report or of any fecal indicator-positive ground water source sample in the next report. The system must continue to inform the public annually until the State determines that particular significant deficiency is corrected or the fecal contamination in the ground water source is addressed. Each report must include the following elements: (A) The nature of the particular significant deficiency or the source of the fecal contamination (if the source is known) and the date the significant deficiency was identified by the State or the dates of the fecal indicator-positive ground water source samples; (B) If the fecal contamination in the ground water source has been addressed under §141.403(a) and the date of such action; (C) For each significant deficiency or fecal contamination in the ground water source that has not been addressed, the State-approved plan and schedule for correction, including interim measures, progress to date, and any interim measures completed; and (D) If the system receives notice of a fecal indicator-positive ground water source sample, the potential health effects using the health effects language from Appendix A of Subpart O.

**** If directed by the State, a system with significant deficiencies that have been corrected before the next report is issued must inform its customers of the significant deficiency, how the deficiency was corrected, and the date of correction.**

Microbiological Contaminants in the Source Water

Fecal Indicator	Number of "Positive/Present" Samples	Date(s) of fecal indicator-positive source water samples	Source of fecal contamination, if known	Significant Deficiency Cited by the State? Y/N (If "Y", see explanation below)	MCLG	MCL	Likely Source of Contamination
<i>E. coli</i> , (presence or absence)					0	0	Human and animal fecal waste
<i>enterococci</i> or coliphage, (presence or absence)					N/A	TT	Human and animal fecal waste

**Insert the applicable information as specified below:

Special Notice for Significant Deficiencies and Fecal Indicator-Positive Ground Water Source Samples:

- (A) Significant deficiency identified/cited by the State [insert information]; Date of State’s Citation: [insert date]
- (B) Has the fecal contamination in the ground water source been addressed under §141.403(a)? ["Yes" or "No"]; Date Corrective Action Completed (if applicable): [insert date or "N/A"];
- (C) For each significant deficiency or fecal contamination in the ground water source that has NOT been addressed: [insert information on the State-approved plan and schedule for corrective action, including interim measures, progress to date, and any interim measures completed]. ****Note:** You may want to attach a copy of your system’s Source Water Corrective Action – Approval letter from the State.
- (D) The potential health effects from the health effects language from Appendix A of Subpart O are as follows:

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

Fecal Indicators (enterococci or coliphage) - Fecal indicators are microbes whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term health effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely compromised immune systems.

****Turbidity:**

**Record the highest single measurement for 2022 and the lowest monthly percentage of samples meeting the turbidity limits. Remove the Turbidity table if not needed for your water system.

Turbidity*

Contaminant (units)	Treatment Technique (TT) Violation Y/N	Your Water	MCLG	Treatment Technique (TT) Violation if:	Likely Source of Contamination
Turbidity (NTU) - Highest single turbidity measurement		NTU	N/A	Turbidity > 1 NTU	Soil runoff
Turbidity (%) - Lowest monthly percentage (%) of samples meeting turbidity limits		%	N/A	Less than 95% of monthly turbidity measurements are ≤ 0.3 NTU	

* 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. The turbidity rule requires that 95% or more of the monthly samples must be less than or equal to 0.3 NTU.

**** For Inorganic, Nitrate/Nitrite, Asbestos, SOC, and VOC Contaminants (regulated and unregulated):**

** For contaminants that are sampled annually or less frequently:

- Record the highest detected result for 2022 under “Your Water”
- If only one sample was collected during 2022, record “N/A” for the range

- If multiple annual samples (due to multiple wells or sources) were collected during 2022, record the lowest and highest results for the range
- If the contaminant was not sampled for during 2022, then use the result(s) from the most recent year it was sampled to fill out the “Your Water” value and range as described above (Note: results from over 5 years ago are not required to be included in the report)

** For contaminants that are sampled quarterly:

- Record the average of all samples collected during report year under “Your Water” (see table below for example calculation. This table should not be included in your completed report)
- Record the lowest and highest results from 2022 for the range

Inorganic Contaminants

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	Range		MCLG	MCL	Likely Source of Contamination
				Low	High			
Antimony (ppb)						6	6	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Arsenic (ppb)						0	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)						2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Beryllium (ppb)						4	4	Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries
Cadmium (ppb)						5	5	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints
Chromium (ppb)						100	100	Discharge from steel and pulp mills; erosion of natural deposits
Cyanide (ppb)						200	200	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
Fluoride (ppm)						4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Mercury (inorganic) (ppb)						2	2	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland
Selenium (ppb)						50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Thallium (ppb)						0.5	2	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories

****If the water system's arsenic result or arsenic average result is above 0.005 mg/L (ppm) but not above 0.010 mg/L (ppm), then the below language is required: (Remove if not needed)**

Arsenic: 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.

Nitrate/Nitrite Contaminants

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	Range		MCLG	MCL	Likely Source of Contamination
				Low	High			
Nitrate (as Nitrogen) (ppm)						10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (as Nitrogen) (ppm)						1	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

****Special Note:** If the water system's nitrate result or nitrate average result is above 5 mg/L (ppm), but not above 10 mg/L (ppm), then the below language is required: (Remove if not needed)

Nitrate: Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

Asbestos Contaminant

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	Range		MCLG	MCL	Likely Source of Contamination
				Low	High			
Total Asbestos (MFL)						7	7	Decay of asbestos cement water mains; erosion of natural deposits

Synthetic Organic Chemical (SOC) Contaminants Including Pesticides and Herbicides

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	Range		MCLG	MCL	Likely Source of Contamination
				Low	High			
2,4-D (ppb)						70	70	Runoff from herbicide used on row crops
2,4,5-TP (Silvex) (ppb)						50	50	Residue of banned herbicide
Alachlor (ppb)						0	2	Runoff from herbicide used on row crops
Atrazine (ppb)						3	3	Runoff from herbicide used on row crops
Benzo(a)pyrene (PAH) (ppt)						0	200	Leaching from linings of water storage tanks and distribution lines
Carbofuran (ppb)						40	40	Leaching of soil fumigant used on rice and alfalfa
Chlordane (ppb)						0	2	Residue of banned termiticide
Dalapon (ppb)						200	200	Runoff from herbicide used on rights of way
Di(2-ethylhexyl) adipate (ppb)						400	400	Discharge from chemical factories
Di(2-ethylhexyl) phthalate (ppb)						0	6	Discharge from rubber and chemical factories
DBCP [Dibromochloropropane] (ppt)						0	200	Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards
Dinoseb (ppb)						7	7	Runoff from herbicide used on soybeans and vegetables
Endrin (ppb)						2	2	Residue of banned insecticide
EDB [Ethylene dibromide] (ppt)						0	50	Discharge from petroleum refineries
Heptachlor (ppt)						0	400	Residue of banned pesticide
Heptachlor epoxide (ppt)						0	200	Breakdown of heptachlor
Hexachlorobenzene (ppb)						0	1	Discharge from metal refineries and agricultural chemical factories
Hexachlorocyclopentadiene (ppb)						50	50	Discharge from chemical factories
Lindane (ppt)						200	200	Runoff/leaching from insecticide used on cattle, lumber, gardens
Methoxychlor (ppb)						40	40	Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, livestock
Oxamyl [Vydate] (ppb)						200	200	Runoff/leaching from insecticide used on apples, potatoes and tomatoes
PCBs [Polychlorinated biphenyls] (ppt)						0	500	Runoff from landfills; discharge of waste chemicals
Pentachlorophenol (ppb)						0	1	Discharge from wood preserving factories
Picloram (ppb)						500	500	Herbicide runoff
Simazine (ppb)						4	4	Herbicide runoff
Toxaphene (ppb)						0	3	Runoff/leaching from insecticide used on cotton and cattle

Volatile Organic Chemical (VOC) Contaminants

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	Range		MCLG	MCL	Likely Source of Contamination
				Low	High			
Benzene (ppb)						0	5	Discharge from factories; leaching from gas storage tanks and landfills
Carbon tetrachloride (ppb)						0	5	Discharge from chemical plants and other industrial activities
Chlorobenzene (ppb)						100	100	Discharge from chemical and agricultural chemical factories
o-Dichlorobenzene (ppb)						600	600	Discharge from industrial chemical factories
p-Dichlorobenzene (ppb)						75	75	Discharge from industrial chemical factories
1,2 – Dichloroethane (ppb)						0	5	Discharge from industrial chemical factories
1,1 – Dichloroethylene (ppb)						7	7	Discharge from industrial chemical factories
cis-1,2-Dichloroethylene (ppb)						70	70	Discharge from industrial chemical factories
trans-1,2-Dichloroethylene (ppb)						100	100	Discharge from industrial chemical factories
Dichloromethane (ppb)						0	5	Discharge from pharmaceutical and chemical factories
1,2-Dichloropropane (ppb)						0	5	Discharge from industrial chemical factories
Ethylbenzene (ppb)						700	700	Discharge from petroleum refineries
Styrene (ppb)						100	100	Discharge from rubber and plastic factories; leaching from landfills
Tetrachloroethylene (ppb)						0	5	Discharge from factories and dry cleaners
1,2,4 –Trichlorobenzene (ppb)						70	70	Discharge from textile-finishing factories
1,1,1 – Trichloroethane (ppb)						200	200	Discharge from metal degreasing sites and other factories
1,1,2 –Trichloroethane (ppb)						3	5	Discharge from industrial chemical factories
Trichloroethylene (ppb)						0	5	Discharge from metal degreasing sites and other factories
Toluene (ppm)						1	1	Discharge from petroleum factories
Vinyl Chloride (ppb)						0	2	Leaching from PVC piping; discharge from plastics factories
Xylenes (Total) (ppm)						10	10	Discharge from petroleum factories; discharge from chemical factories

**Lead and Copper

**You must include the 90th percentile and number of sites that were above the action level from your most recent round of lead and copper sampling. This information can be found under the “PBCU Summaries” in Drinking Water Watch (<https://www.pwss.enr.state.nc.us/NCDWW>) or calculated using the “90th Percentile Worksheet” located on our website (<https://files.nc.gov/ncdeq/Water%20Resources/files/pws/compliance/Lead-and-Copper-90th-Percentile-Summary---click-to-enter.pdf>)

**Lead and copper results are usually reported in ppm or mg/l, but in the CCR, lead results must be converted to ppb or µg/l. You can convert ppm to ppb by multiplying the ppm result by 1000.

Lead and Copper Contaminants

Contaminant (units)	Sample Date	Your Water (90 th Percentile)	Number of sites found above the AL		MCLG	AL	Likely Source of Contamination
Copper (ppm) (90 th percentile)					1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb) (90 th percentile)					0	AL=15	Corrosion of household plumbing systems; erosion of natural deposits

****Radionuclides:**

** If taking quarterly samples or more than one sample was taken per quarter, average the results for each quarter, then average the 4 quarters to get the running annual average (RAA) for “Your Water” value. If the lab did a composite sample, then no averaging is needed; use the composite results provided by the lab.

Radiological Contaminants

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water (RAA)	Range		MCLG	MCL	Likely Source of Contamination
				Low	High			
Alpha emitters (pCi/L) (Gross Alpha Excluding Radon and Uranium)						0	15	Erosion of natural deposits
Beta/photon emitters (pCi/L)						0	50 *	Decay of natural and man-made deposits
Combined radium (pCi/L)						0	5	Erosion of natural deposits
Uranium (pCi/L)						0	20.1	Erosion of natural deposits

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

****Total Organic Carbon (TOC):**

**TOC removal is REQUIRED for all surface water and groundwater under the direct influence of surface water (GWUDI) systems using conventional filtration, regardless of population served. The system should calculate the TOC Removal Ratio RAA for each quarter in 2022 and list the lowest RAA in the column entitled “Your Water.” The highest and lowest monthly removal ratios must be recorded the column entitled “Range.”

Total Organic Carbon (TOC)

Contaminant (units)	TT Violation Y/N	Your Water (lowest RAA)	Range Monthly Removal Ratio Low - High	MCLG	Treatment Technique (TT) violation if:	Likely Source of Contamination
Total Organic Carbon (TOC) Removal Ratio (no units)				N/A	Removal Ration RAA <1.00 and alternative compliance criteria was not met	Naturally present in the environment

**If lowest removal ratio RAA was <1.00 and compliance with the TOC TT requirement was achieved through one of the alternative compliance criteria, you must include the sentence below with an explanation of which alternative compliance criteria was used. The RAA of our removal ratio was below 1.00 during the ... quarter of 2022, but this was not a treatment technique violation because we met the alternative compliance criteria for TOC removal by ...

****Disinfectant Residuals:**

**For chlorine/chloramines, record the highest quarterly running annual average (RAA) in “Your Water” column. The range should be the lowest to highest results of all compliance samples. You may retrieve this information which is already calculated for you by going to: <https://www.pwss.enr.state.nc.us/ncdww/>

- Enter your water system ID number (i.e. NC9999999, no dashes) click Search
- On this page, click on the water system ID number
- On the next page that appears, select the “Residual Disinfectant (for CCR) link.

If you choose to calculate the highest RAA yourself, here is an example:

Samples (ppm)	Apr. 2021	May 2021	Jun. 2021	Jul. 2021	Aug. 2021	Sept. 2021	Oct. 2021	Nov. 2021	Dec. 2021	Jan. 2022	Feb. 2022	Mar. 2022	Apr. 2022	May 2022	Jun. 2022	Jul. 2022	Aug. 2022	Sept. 2022	Oct. 2022	Nov. 2022	Dec. 2022
All results for specified month	1.8	1.4	1.4	1.2	1.0	1.4	1.1	1.2	1.0	1.0	1.4	1.0	1.1	1.4	1.0	1.2	1.1	1.4	1.0	1.4	1.1
	1.9	2.3	1.6	0.6	1.5	0.9	1.7	0.6	1.5	1.1	2.3	1.5	1.5	0.9	1.5	0.6	1.5	2.3	1.5	0.9	1.7
	2.8	1.9	2.6	1.5	2.3	1.6	2.3	1.5	2.3	2.3	1.9	2.3	2.0	1.6	2.3	1.5	2.0	1.9	2.3	1.6	2.3
	3.5	3.0	2.9	1.6	3.3	1.8	3.3	1.6	3.3	2.9	3.0	3.3	2.3	1.8	3.3	1.6	2.3	3.0	3.3	1.8	3.3
	2.5	2.9	2.5	2.1	2.4	2.3	2.6	2.1	2.4	2.2	2.9	2.4	2.1	2.3	2.4	2.1	2.1	2.9	2.4	2.3	2.6
Monthly Average	2.5	2.3	2.2	1.2	2.1	1.4	2.2	1.2	2.1	1.9	2.3	2.1	1.8	1.4	2.1	1.2	1.8	2.3	2.1	1.4	2.2
RAA (calculate for the end of each quarter by averaging the last 12 monthly averages)												2.0			1.8			1.9			1.9

**Note: Gray highlighted numbers in table above represent the range and the highest RAA. These are the numbers that should be included in the table below in your CCR. The above table is for calculation purposes and should not be included in your CCR.

**If your system uses chlorine dioxide, you must include the range of chlorine dioxide results for the report year in ppb or µg/l, but do not need to list the highest RAA because compliance with the MRDL is not based on an RAA. If any chlorine dioxide results were over the MRDL, provide a brief description below the table of why or why not a MRDL violation occurred.

Disinfectant Residuals Summary

	MRDL Violation Y/N	Your Water (highest RAA)	Range		MRDLG	MRDL	Likely Source of Contamination
			Low	High			
Chlorine (ppm)					4	4.0	Water additive used to control microbes
Chloramines (ppm)					4	4.0	Water additive used to control microbes
Chlorine dioxide (ppb)		N/A			800	800	Water additive used to control microbes

****Stage 2 Disinfection Byproducts (Stage 2 DBPs):**

**In “Your Water” column, record the highest locational running annual average (LRAA).

**For each monitoring location, report the range (lowest to highest results) of all compliance samples.

** If an MCL violation occurred, include a discussion of the MCL violation, including health effects language, below the appropriate table. Systems with a LRAA MCL exceedance at more than one location, must report the highest LRAA for each location that exceeded the MCL.

**** Stage 2 DBPs –TTHM EXAMPLE WORKSHEET (not to be included in CCR):**

TTHM Calculation (in ppb)	2 nd quarter 2021*	3 rd quarter 2021*	4 th quarter 2021*	1 st quarter 2022	2 nd quarter 2022	3 rd quarter 2022	4 th quarter 2022
Site 1 Quarterly Results	62	77	82	67	86	125	78
Site 1- LRAA				72	78	90	89
Site 2 Quarterly Results	27	26	74	40	55	115	60
Site 2- LRAA				42	49	71	68
Site 3 Quarterly Results	27	21	67	45	60	105	70
Site 3- LRAA				40	48	69	70
Site 4 Quarterly Results	81	30	77	50	65	135	62
Site 4- LRAA				60	55	82	78

**the previous 3 quarters results are included in this table because they are necessary to calculate LRAAs for the report year

**Note: Gray highlighted numbers in table above represent the range for each site and the highest LRAA for sites with LRAAs over the MCL (if no LRAAs were over the MCL, only the highest LRAA across all sites should be included). These are the numbers that should be included in the table below in your CCR. The above table is for calculation purposes and should not be included in your CCR.

**Example of table to be included in CCR based on above TTHM example worksheet. (HAA5 portion of table is not shown)

Disinfection Byproduct	Year Sampled	MCL Violation Y/N	Your Water (highest LRAA)	Range		MCLG	MCL	Likely Source of Contamination
				Low	High			
TTHM (ppb)	2022	Y				N/A	80	Byproduct of drinking water disinfection
B01			90	67 - 125				
B02				40 - 115				
B03				45 - 105				
B04			82	50 - 135				

Stage 2 Disinfection Byproduct Compliance - Based upon Locational Running Annual Average (LRAA)

Disinfection Byproduct	Year Sampled	MCL Violation Y/N	Your Water (highest LRAA)	Range		MCLG	MCL	Likely Source of Contamination
				Low	High			
TTHM (ppb)						N/A	80	Byproduct of drinking water disinfection
Location (Ex. B01)								
HAA5 (ppb)						N/A	60	Byproduct of drinking water disinfection
Location (Ex. B01)								

****If any individual TTHM sample result (regardless of LRAA) is above 0.080 mg/l, you must include the following:**
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.

****If any individual HAA5 sample result (regardless of LRAA) is above 0.060 mg/l, you must include the following:**
Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.

**** Other Disinfection Byproducts Contaminants:**

****Bromate:** record the highest quarterly running annual average (RAA) in “Your Water” column. The range should be the lowest to highest results of all compliance samples. Here is an example of how to calculate this:

Samples (ppb)	Apr. 2021	May 2021	Jun. 2021	Jul. 2021	Aug. 2021	Sept. 2021	Oct. 2021	Nov. 2021	Dec. 2021	Jan. 2022	Feb. 2022	Mar. 2022	Apr. 2022	May 2022	Jun. 2022	Jul. 2022	Aug. 2022	Sept. 2022	Oct. 2022	Nov. 2022	Dec. 2022
Monthly Average	6	2	0	8	8	9	5	3	6	5	3	3	0	11	3	5	6	8	6	7	10
RAA (only calculate for the end of each quart by averaging the last 12 monthly averages)												5			5						6

****Note:** Gray highlighted numbers in table above represent the range and the highest RAA. These are the numbers that should be included in the table below in your CCR. The above table is for calculation purposes and should not be included in your CCR.

****Chlorite:** record the highest three sample set average in the “Your Water” column. The range should be the lowest to highest results of all compliance samples. Here is an example of how to calculate this:

Sample Date	1 st Customer Result	Average Residence Time Result	Max Residence Time Result	Average of three results
1/3/2022	0.3	0.2	0.1	0.2
4/11/2022	0.8	0.5	0.6	0.6
7/8/2022	0.7	0.4	0.1	0.4
10/2/2022	0.3	0.4	0.2	0.3

****Note:** Gray highlighted numbers in table above represent the range and the highest three sample set average. These are the numbers that should be included in the table below in your CCR. The above table is for calculation purposes and should not be included in your CCR.

Other Disinfection Byproducts Contaminants

Contaminant (units)	MCL/MRDL Violation Y/N	Your Water	Range Low High	MCLG	MCL	Likely Source of Contamination
Bromate (ppb)				0	10	By-product of drinking water disinfection
Chlorite (ppm)				0.8	1.0	By-product of drinking water chlorination

****Additional contaminants that can be included in the report: (Remove if not wanted.)**

The PWS Section requires monitoring for other misc. contaminants, some for which the EPA has set national secondary drinking water standards (SMCLs) because they may cause cosmetic effects or aesthetic effects (such as taste, odor, and/or color) in drinking water. The contaminants with SMCLs normally do not have any health effects and normally do not affect the safety of your water.

Other Miscellaneous Water Characteristics Contaminants

Contaminant (units)	Sample Date	Your Water	Range Low High	SMCL
Iron (ppm)				0.3 mg/L
Manganese (ppm)				0.05 mg/L
Nickel (ppm)				N/A
Sodium (ppm)				N/A
Sulfate (ppm)				250 mg/L
pH				6.5 to 8.5

Cryptosporidium

****If the system has performed any monitoring for *Cryptosporidium*, including monitoring to satisfy the Information Collection Rule (ICR) requirements, which indicates that *Cryptosporidium* may be present in the [source water](#) or the [finished water](#), the CCR must contain a summary of the analytical results of the monitoring and an explanation of the significance of the results. A sample explanation is given below. Remove this section if not needed.**

Our system monitored for *Cryptosporidium* and found levels of [\[insert data\]](#).

Cryptosporidium is a microbial pathogen 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. Ingestion of *Cryptosporidium* may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people, infants and small children, and the elderly are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. *Cryptosporidium* must be ingested to cause disease, and it may be spread 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 analytical results of the monitoring and an explanation of the significance of the results. Following is a possible explanation. Remove this section if not needed.**

Our system monitored for Radon and found levels of [\[insert data\]](#).

Radon is a radioactive gas that you cannot see, taste, or smell. It is found throughout the U.S. 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. (You should pursue radon removal for 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 are not too costly. For additional information, call your state radon program or call EPA's Radon Hotline (800-SOS-RADON).

Unregulated Contaminants

If any unregulated contaminants, including those from the **Unregulated Contaminant Monitoring Regulation (UCMR), are detected, include the paragraph below and provide the information in the table. The data for detections of these contaminants need only be included in the report for the year that the samples were taken. Remove the paragraph and the table below if no unregulated contaminants were detected.

If the water system participated in the **Information Collection Rule (ICR) and/or the **UCMR** (where the water system reported directly to EPA), any detected results must be included in the report.

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

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 regulations are warranted.

Unregulated Contaminants

Contaminant (units)	Sample Date	Your Water (average)	Range	
			Low	High

Additional Monitoring of Other Contaminants

If the system has performed additional monitoring and this monitoring indicates the presence of other contaminants in the finished water, EPA **strongly encourages the system to report any results that may indicate a health concern. To determine if results may indicate a health concern, EPA recommends that systems find out if EPA has proposed a National Primary Drinking Water Regulation or issued a health advisory for that contaminant by calling the EPA Safe Drinking Water Hotline (800-426-4791). EPA considers detects above a proposed MCL or health advisory level to indicate possible health concerns. For such contaminants, EPA recommends that the report include the results of monitoring, and an explanation of the significance of the results noting the existence of a health advisory or a proposed regulation. The EPA website (<http://www.epa.gov/safewater/hfacts.html>) may provide additional information. Again, if provided, this information must be displayed outside of the detected contaminants table(s).