| <b>T</b> 7 4                                   | Consumer Confidence Report (CCR) Certification Form   |
|--|---|
| <b>Vate</b>                                    | System Name: HANDY SANITARY DISTRICT  |
| <b>Vate</b>                                    | System No.: NC_0 2 - 2 9 - 0 3 5  |
| 41 ar<br>nave b<br>consis<br>certifi<br>as den | ommunity Water System (CWS) named above hereby confirms that all provisions under 40 CFR parts and 142 requiring the development of, distribution of, and notification of a consumer confidence report been executed. Further, the CWS certifies the information contained in the report is correct and tent with the compliance monitoring data previously submitted to the primacy agency by their NC ed laboratory. In addition, if this report is being used to meet Tier 3 Public Notification requirements, oted by the checked box below, the CWS certifies that public notification has been provided to its mers in accordance with the requirements of 40 CFR 141.204(d). |
| <u>Certif</u>                                  | ied by: Name: JUSTIN SULLIVAN Title: ORC  |
|  | <b>Signature: Phone</b> #:336-859-2553  |
|  | Delivery Achieved Date: 06/01/19 Date Reported to State: 05/28/19   |
| ∃Th  | e CCR includes the mandated Public Notice for a monitoring violation (check box, if yes)  |
|  | to the menutes the manuacter I ushe I voice for a monitoring violation (eneck box, if yes)  |
| heck   | all methods used for distribution (see instructions on back for delivery requirements and methods):   |
|  | Paper copy to all US Mail Hand Delivery   |
|  | •   |
|  |   |
|  | Notification Method (i.e. US Mail, door hanger)   |
|  | Notification of CCR URL URL:  |
|  | Notification Method(i.e. on bill, bill stuffer, separate mailing, email)  |
|  | Direct email delivery of CCR (attached? or embedded?)   |
|  | Notification Method (i.e. on bill, bill stuffer, separate mailing   |
|  |   |
|  | Notification Method (i.e. US Mail, on bill, bill  |
|  | stuffer, door hanger, a postcard dedicated to the CCR, or email)  |
|  | "Good faith" efforts (in addition to 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)   |
|  | □ posting the CCR in public places such as: (attach list if needed)   |
|  |   |
|  | delivery of multiple copies to single bill addresses serving several persons such as: apartments, businesses, and large private employers   |

**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**

## Submittal of your CCR and Certification Form to the Public Water Supply Section

Beginning in 2018, the CCR for report year 2017 and future years <u>must</u> be submitted using our new <u>ECERT Online Certification</u> application. You <u>must</u> submit your CCR and Certification form using the links provided below. Follow the directions to ensure efficient tracking and receipt of your submittal, expedited review of report data by the Public Water Supply (PWS) Section, and your system's compliance with state and federal regulations.

- CCR Template: <a href="http://ncdenr.s3.amazonaws.com/s3fs-public/Water%20Resources/files/pws/pnrule/CCR\_Template\_(with%20Certification%20&%20ECert%20Inst.)\_lfr.doc</a>
- ECERT Online Certification and Submittal of CCR: <a href="https://pws.ncwater.org/ECERT/pages/default.aspx">https://pws.ncwater.org/ECERT/pages/default.aspx</a>
  For assistance with accessing ECERT please send email to: <a href="mailto:pwss.ccr@ncdenr.gov">pwss.ccr@ncdenr.gov</a> (use 'Return Receipt Requested' to verify PWS Section's receipt.)

  Note: ECERT Access Instructions are located at the following link:

  <a href="https://files.nc.gov/ncdeg/Water%20Resources/files/pws/compliance/ECERT\_Access%20Instructions\_Revision\_tam\_lfr.pdf">https://files.nc.gov/ncdeg/Water%20Resources/files/pws/compliance/ECERT\_Access%20Instructions\_Revision\_tam\_lfr.pdf</a>

If you do <u>not</u> have internet access, please submit using the following methods:

- ➤ <u>By Postal Mail</u>: Mail your CCR <u>and</u> Certification form to: Public Water Supply Section, 1634 Mail Service Center, Raleigh, NC 27699-1634, Attn: CCR Rule Manager. (Physical Location: Archdale Bldg. 13<sup>th</sup> floor, 512 N. Salisbury St., Raleigh, NC)
- **By FAX:** FAX your CCR and Certification form to (919) 715-6637, Attn: CCR Rule Manager

## **CCR Customer Direct Delivery Requirements (Based on Population)**

- > 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 by mail or direct delivery.
- > Systems serving less than 10,000 persons but more than 500 persons must either: (1) distribute the CCR by mail or direct delivery <u>OR</u> (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 2<sup>nd</sup> option is <u>not</u> acceptable if using the CCR for Tier 3 Public Notification!)
- Systems serving 500 or fewer persons must either: (1) distribute the CCR by mail or direct delivery <u>OR</u> (2) notify their customers that the CCR is not being mailed, and a copy of the CCR must be made available upon request. (The 2<sup>nd</sup> option is not acceptable if using the CCR for Tier 3 Public Notification!)

**CCR Direct Delivery Methods for Bill-Paying Customers** 

|                                     | METHOD DESCRIPTION   |  |  |  |  |  |  |
|-------------------------------------|--|--|--|--|--|--|--|
| CCR DELIVERY METHOD                 | (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.                                  |  |  |  |  |  |  |
|                                     | CWS mails to each bill-paying customer a notification that the CCR is available and provides a   |  |  |  |  |  |  |
| Mail – notification that CCR is     | direct URL to the CCR on a publicly available site on the Internet where it can be viewed. A     |  |  |  |  |  |  |
| available on web site via a direct  | URL that navigates to a web page that requires a customer to search for the CCR or enter other   |  |  |  |  |  |  |
| URL                                 | information does not meet the "directly deliver" requirement. The mail method for the            |  |  |  |  |  |  |
| OKL                                 | 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.  |  |  |  |  |  |  |
|                                     | 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    |  |  |  |  |  |  |
| Email – direct URL to CCR           | 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.       |  |  |  |  |  |  |
| Email – CCR sent as an attachment   | CWS emails the CCR as an electronic file email attachment [e.g., portable document format        |  |  |  |  |  |  |
| to email                            | (PDF)]. This method may only be used for customers when a CWS has a valid email address to       |  |  |  |  |  |  |
| to cinan                            | deliver the CCR electronically. See Figure 3 in the Appendix.                                    |  |  |  |  |  |  |
| Email – CCR sent as an embedded     | CWS emails the CCR text and tables inserted into the body of an email (not as an attachment.)    |  |  |  |  |  |  |
| image in an email                   | This method may only be used for customers when a CWS has a valid email address to deliver       |  |  |  |  |  |  |
| image in an eman                    | the CCR electronically. See Figure 4 in the Appendix.  |  |  |  |  |  |  |
| Additional electronic delivery that | CWS delivers CCR through a method that "otherwise directly delivers" to each bill-paying         |  |  |  |  |  |  |
| meets "otherwise directly deliver"  | customer and in coordination with the primacy agency. This category is intended to encompass     |  |  |  |  |  |  |
| requirement                         | 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."   |  |  |  |  |  |  |

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

01/2019

# 2018 Annual Drinking Water Quality Report Handy Sanitary District

Water System Number: 02-29-035

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 Darrell Hinnant at 336-859-2553]. 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 District office, located at 17403 S. Hwy 109, Denton NC 27239 on the third Tuesday of each month, 6:00pm.

#### What EPA Wants You to Know

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.

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

The water that is used by the system is surface water from the Tuckertown Reservoir and the raw water intake is located on Bringle Ferry Road at the Davidson/Rowan County line. Tuckertown Reservoir is a part of the Yadlin/Pee Dee River Basin.

## Source Water Assessment Program (SWAP) Results

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:

#### **Susceptibility of Sources to Potential Contaminant Sources (PCSs)**

| Source Name  | Susceptibility Rating | SWAP Report Date |
|--------------|-----------------------|------------------|
| Yadkin River | Higher                | July 2016        |

The complete SWAP Assessment report for [SYSTEM NAME] may be viewed on the Web at: <a href="https://www.ncwater.org/?page=600">https://www.ncwater.org/?page=600</a> 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" <u>does not</u> imply poor water quality, only the system's potential to become contaminated by PCSs in the assessment area.

# **Help Protect Your Source Water**

Protection of drinking water is everyone's responsibility. 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.).

#### **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 <u>detected</u> in the last round of sampling for each particular contaminant group. The presence of contaminants does <u>not</u> 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, (2016).** 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.

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.

#### **Important Drinking Water Definitions:**

**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.

*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.

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.

**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.

## **Tables of Detected Contaminants**

## **REVISED TOTAL COLIFORM RULE:**

Microbiological Contaminants in the Distribution System - For systems that collect less than 40 samples per month

| 1 of systems that concert cost with the Distribution System. |                         |               |      |  |                                      |  |  |  |
|--|-------------------------|---------------|------|--|--------------------------------------|--|--|--|
| Contaminant (units)  | MCL<br>Violation<br>Y/N | Your<br>Water | MCLG | MCL  | Likely Source of<br>Contamination    |  |  |  |
| Total Coliform Bacteria (presence or absence)                | N/A                     | N/A           | N/A  | TT*  | Naturally present in the environment |  |  |  |
| E. coli (presence or absence)                                | N                       | 0             | 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> Note: 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         |  |  |  |

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

Turbidity\*

| i di bidity   |  |            |      |   |                                   |
|---|--|------------|------|---|-----------------------------------|
| Contaminant (units)   | Treatment Technique (TT) Violation Y/N | Your Water | MCLG | Treatment Technique (TT) Violation if:                        | Likely Source of<br>Contamination |
| Turbidity (NTU) - Highest single turbidity measurement                              | N                                      | 0.161 NTU  | N/A  | Turbidity > 1 NTU   |                                   |
| Turbidity (NTU) - Lowest monthly percentage (%) of samples meeting turbidity limits | N                                      | 100%       | N/A  | Less than 95% of monthly turbidity measurements are ≤ 0.3 NTU | Soil runoff                       |

<sup>\*</sup> 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.

Synthetic Organic Chemical (SOC) Contaminants Including Pesticides and Herbicides

| Contaminant (units) | Sample<br>Date | MCL<br>Violation<br>Y/N | Your<br>Water | Range Low High | MCLG | MCL | Likely Source of Contamination          |
|---------------------|----------------|-------------------------|---------------|----------------|------|-----|---|
| Atrazine (ppb)      | 6/27/18        | N                       | .0002         | 0.0002-0.0002  | 3    | 3   | Runoff from herbicide used on row crops |

**Lead and Copper Contaminants** 

| cau and copper contaminants                 |                |               |  |      |        |  |  |  |  |
|---|----------------|---------------|--|------|--------|--|--|--|--|
| Contaminant (units)                         | Sample<br>Date | Your<br>Water | Number of<br>sites found<br>above the AL | MCLG | AL     | Likely Source of Contamination                                       |  |  |  |
| Copper (ppm) (90 <sup>th</sup> percentile)  | 9/27/18        | 0.176         | 0  | 1.3  | AL=1.3 | Corrosion of household plumbing systems; erosion of natural deposits |  |  |  |
| Lead (ppb)<br>(90 <sup>th</sup> percentile) | 9/27/18        | 0.007         | 0  | 0    | AL=15  | Corrosion of household plumbing systems; erosion of natural deposits |  |  |  |

**Disinfectant Residuals Summary** 

|                | Year<br>Sampled | MRDL<br>Violation<br>Y/N | tion (highest RAA) |      | ange<br>High | MRDLG | MRDL | Likely Source of Contamination          |
|----------------|-----------------|--------------------------|--------------------|------|--------------|-------|------|---|
| Chlorine (ppm) | 2018            | N                        | 1.05               | 0.07 | 1.37         | 4     | 4.0  | Water additive used to control microbes |

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

| Disinfection<br>Byproduct | Year<br>Sampled | MCL<br>Violation<br>Y/N | Your<br>Water<br>(highest LRAA) | Ra<br>Low | Range<br>Low High |     |    |  | MCL | Likely Source of<br>Contamination |
|---------------------------|-----------------|-------------------------|---------------------------------|-----------|-------------------|-----|----|--|-----|-----------------------------------|
| TTHM (ppb)                |                 |                         |                                 |           |                   | N/A | 80 | Byproduct of drinking water disinfection |     |                                   |
| B01                       | 2018            | N                       | 0.052                           | 0.042     | 0.075             |     |    |  |     |                                   |
| B02                       | 2018            | N                       | 0.048                           | 0.031     | 0.066             |     |    |  |     |                                   |
| HAA5 (ppb)                |                 |                         |                                 |           |                   | N/A | 60 | Byproduct of drinking water disinfection |     |                                   |
| B01                       | 2018            | N                       | 0.039                           | 0.027     | 0.053             |     |    |  |     |                                   |
| B02                       | 2018            | N                       | 0.043                           | 0.032     | 0.056             |     |    |  |     |                                   |

For TTHM: 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.

For HAA5: Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.