2014 Annual Drinking Water Quality Report

Richmond County Water System

PWS ID# 03-77-109

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 from where your water comes, 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.

We are pleased to report that our drinking water is safe and meets federal and state requirements.

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. Immunocompromised 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 microbiological 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 homes plumbing. Richmond County Water System 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 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 storm water 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 storm water 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 storm water 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

Richmond County uses surface water from Blewett Falls Lake or Pee Dee River. We also purchase water from Anson County, which also uses water from the same source.

Source Water Assessment Program (SWAP) Results

The North Carolina Department of Environment and Natural Resources (DENR), 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 Richmond County Water System 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
Pee Dee River	Moderate

The complete SWAP Assessment report for Richmond County Water System may be viewed on the Web at: http://www.deh.enr.state.nc.us/pws/swap To obtain a printed copy of this report, please mail a written request to: Source Water Assessment Program – Report Request, 1634 Mail Service Center, Raleigh NC 27699-1634, or email request to swap@ncmail.net. Please indicate your system name, PWSID, 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 919-715-2633.

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

What If I Have Any Questions Or Would Like to Become More Involved?

If you have any questions about this report or concerning water treatment, please contact Matthew Locklear at the Richmond County Water Treatment Plant at 997-8339 between the hours of 7am and 3pm Monday-Friday. Any general or overall Water Department questions should be directed to Director of Public Works, Bryan Land at 997-8234. Specific water maintenance questions should be directed to Water Maintenance Supervisor Jerry Austin at 997-8290. If you have any water billing questions, you should call the Water Administration personnel at 997-8202. General information is also available on Richmond County's web site http://www.richmondnc.com

Water Quality Data Table of Detected Contaminants

We routinely monitor for over 150 contaminants in your drinking water according to Federal and State laws. The table below lists all the drinking water contaminants that we detected in the last round of sampling for the 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, 2014. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

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

Important Drinking Water Definitions:

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 - one part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.

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.

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 treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Maximum Residual Disinfection Level Goal – The "Level" (MRDLG) 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.

Maximum Residual Disinfection Level – The "Highest Level" (MRDL) of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Contaminant Level - The "Maximum Allowed" (MCL) is 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 - The "Goal" (MCLG) is 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.

Extra Note: MCL's are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a million chance of having the described health effect.

Microbiological Contaminants: Richmond County

Contaminant (units)	MCL Violation Y/N	MCLG	MCL	Likely Source of Contamination
Total Coliform Bacteria (presence or absence)	N	0	one monthly positive	Naturally present in the environment
Fecal Coliform or E. coli (presence or absence)	N	0	a routine sample and repeat sample are total coliform positive, and one is also fecal coliform or E. coli positive	Human and animal fecal waste

Microbiological Contaminants: Anson County

Contaminant (units)	MCL Violation Y/N	MCLG	MCL	Likely Source of Contamination
Total Coliform Bacteria (presence or absence)	N	0	one monthly positive	Naturally present in the environment
Fecal Coliform or E. coli (presence or absence)	N	0	a routine sample and repeat sample are total coliform positive, and one is also fecal coliform or E. coli positive	Human and animal fecal waste

Turbidity-Systems with population >10,000

Contaminant (units)	MCL Violation Y/N	Richmond County	Anson County	MCLG	MCL	Likely Source of Contamination
Turbidity (NTU)	N	.12	.31	N/A	TT = 1NTU	Soil Runoff
Turbidity (Lowest monthly percent of samples meeting limit)	N	99%	99%	%	TT = percentage of samples <0.3 NTU	

Inorganics Contaminants

Contaminant (units)	Sample Date	MCL Violation	Richmond County	Anson County	Range Low/High	MCLG	MCL	Likely Source of Contamination
Flouride (ppm)	2014	N	.063	.68	Anson (.24-1.45)	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories

Unregulated Inorganics Contaminant

Contaminant (units)	Sample Date	Richmond County	Anson County	Range Low/High	Proposed MCL
Sulfate (ppm)	2014	24.6	20.0	N/A	500

Nitrate/Nitrite Contaminants

Contaminant (units)	MCL Violation	Richmond County	Range Low/High	MCLG	MCL	Likely Source of Contamination
Nitrate (as Nitrogen) (ppm)	N	.52	N/A	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

Lead and Copper Contaminants

Contaminant (units)	Sample Date	Your Water	Anson County	# of sites found above the AL	MCLG	MCL	Likely Source of Contamination
Copper (ppm) (90th percentile)	9/14/12	.674	.1570	0	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppm) (90th percentile)	9/14/12	ND	ND	0	0	AL=.015	Corrosion of household plumbing systems, erosion of natural deposits

Radiological Contaminants

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	MCLG	MCL	Likely Source of Contamination
Beta/photon emitters (pCi/l)	2006	N	1.0	0	50	Decay of natural and man-made deposits
Beta/photon emitters (pCi/l) Anson County	2004	N	6	0	50	Decay of natural and man-made deposits

Our water system used Step 1 as the method used to comply with d/DBP treatment technique requirements.

Disinfection By-Product Precursors Contaminants

Contaminant (units)	Sample Date	MCL/TT Violation Y/N	Your Water	Range Low /High	MCLG	MCL	Likely Source of Contamination
Total Organic Carbon (ppm) (TOCs)-TREATED	2014	N	1.6	1.4/1.7	N/A	TT	Naturally present in the environment

Note: Depending on the TOC in our source water the system MUST have a certain % removal of TOC or must achieve alternative compliance criteria. If we do not achieve that % removal there is an "alternative % removal". If we fail to meet that, we are in violation of a Treatment Technique.

STEP 1 TOC Removal Requirements

	Source Water Alkalinity Mg/L as CaCO3 (in percentages)		
Source Water TOC (mg/L)	0 – 60	>60 – 120	>120
2.0 – 4.0	35.0	25.0	15.0
3.0 – 8.0	45.0	35.0	25.0
4.0 > 8.0	50.0	40.0	30.0

Disinfection By-Product Contaminants

Contaminant (units)	MCL/MRDL Violation Y/N	Your Water (High Avg)	Range Low High	MCLG	MCL	Likely Source of Contamination
TTHM (ppb) [Total Trihalomethanes]	Y	84	43 - 120	N/A	80	By-product of drinking water chlorination
HAA5 (ppb) [Total Haloacetic Acids]	Y	68	5 - 130	N/A	60	By-product of drinking water disinfection
Chlorine (ppm)	N	2.02	1.75 – 2.71	MRDLG = 4	MRDL = 4	Water additive used to control microbes

During the 3rd quarter of the year 2014, Richmond County Water System exceeded our TTHM (total Trihalomethanes) at three of four site locations in our water system. Also, there were exceedances in HAA5 (Haloacetic Acids) in three of four site locations in our water system. Due to these exceedances the Richmond County Water System failed to meet compliance with the LRAA (Locational Running Average Annual) at two sites for TTHM and one site for HAA5. This is based on four (8) routine site samplings per quarter of each year.

The mcl (maximum contaminant level) for THM's (total Trihalomethanes) is 80 ppb (parts per billion). , Because this is a by-product from the disinfection process it is not uncommon for that time of the year, due to temperature change and heat. Health effects of THM's (total Trihalomethanes) in excess of the mcl (maximum containment level) in some people over many years may have problems with liver, kidneys, central nervous system, and may have an increased risk of getting cancer. Corrective actions have been taken to help with the quality of the water. Such as an adequate routine flushing program and reduction in the application of disinfectant chemical.

Additional info on these and past Disinfection By-Product compliance issues specific to the Richmond County Water System as Notices to the Public are included as additions at the end of this Consumer Confidence Report.

Disinfection By-Product Contaminants: Anson County

Contaminant (units)	MCL/MRDL Violation Y/N	Anson Water (High Avg)	Range Low High	MCLG	MCL	Likely Source of Contamination
TTHM (ppb) [Total Trihalomethanes]	N	43	16 - 110	N/A	80	By-product of drinking water chlorination
HAA5 (ppb) [Total Haloacetic Acids]	N	37	30 - 84	N/A	60	By-product of drinking water disinfection
Chlorine (ppm)	N	.94	.8 – 2.3	MRDLG = 4	MRDL = 4	Water additive used to control microbes
Chloramines (ppm)	N	3.2	1.22-3.77	4	4	Water additive used to control microbes

Locational Running Annual Averages

WS Number	Location	Contaminant	High LRAA	Mon. Period
NC0377109	COUNTY HOME & WINEGRASS 017	HAA5	.06775	4th Quarter 2014
NC0377109	HOFF US 1 BOX SITE 080	TTHM	.084	4th Quarter 2014

Secondary Contaminants, required by the NC Public Water Supply Section, are substances that affect the taste, odor, and/or color of drinking water. These aesthetic contaminants normally do not have any health effects and normally do not affect the safety of your water.

Water Characteristics Contaminants

Contaminant (units)	Sample Date	Your Water	Anson County	Range Low/ High	Secondary MCL	Typical Source
Iron (ppm)	2014	Not detected	.3	N/A	.3	Leaching from natural deposits; Industrial wastes
Manganese (ppm)	2014	.015	.009	N/A	.05	Leaching from natural deposits
Nickel (ppm)	2014	Not Detected	ND	N/A	N/A	N/A
Sodium (ppm)	2014	23.4	18.3	N/A	N/A	N/A
pH	2014	7.0	7.4	N/A	6.5 to 8.5	Naturally occurring

For more information, please contact:

Responsible Person **Matthew Locklear**	System Name **Richmond County Water**	System Address (street) **326 Old Charlotte Hwy**
Phone Number **(910)997-8339**	System PWSID# **NC0377109**	System Address (city/ state/zip) **Rockingham, NC 28379**

Contaminant Group List

- (BA) Total Coliform Bacteria- includes Fecal/E.coli bacteria is required if total coliform is present in the sample.
- (AS) Asbestos- includes testing for Chrysotile, Amphibole and Total Asbestos.
- (TTHM)-Total Trihalomethanes- include Chloroform, Bromoform, Bromodichloromethane, and Chlorodibromomethane.
- (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.
- (HAA5)-Haloacetic Acids-include Monochloroacetic Acid, Dichloroacetic Acid, Trichloroacetic Acid, Monobomacetic Acid, Dibromoacetic Acid.
- (BB) Bromate/Bromid- includes testing for Bromate and/or Bromide.
- (CD) Chlorine Dioxide/Chlorite- includes testing for Chlorine Dioxide and/or Chlorite.
- (IC) 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- includes testing 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, Gross Beta, Tritium, Strontium 89, Strontium 90, Iodine 131, and Cesium 134.
- (SOC) Synthetic Organic Chemicals/Pesticides-SOC's are commonly used in industrial and manufacturing processes. SOC's include 2,4-D, 2,4,5-TP (Silvex), 3-Hydroxycarbofuran, Alachlor, Aldicard, Aldicarb Sulfone, Aldicard Sulfoxide, Aldrin, Atrzine, Benzo(a)pyrene, Butachlor, Carbaryl, Carbofuran, Chlordane, Dalapon, Dieldrin, DI(2-ethylhexyl)adipat, Di(2-ethylhexyl)phthalate, Dibromochloropropane (DBCP), Dicamba, Dinoseb, Endrin, Ethylene dibromide (EDB), Heptachlor, HHeptachlor Epoxide, Hexachlorobenzene, Hexachlorocyclopentadiene, Lindane, Methomyl, Metolachlor, Methoxychlor, Metribuzin, Oxamyl(vydate), PCBs, Propachlor, Pentachlorophenol, Picloram, Simazine, Toxaphene.
- (VOC)-Volatile Organic Chemicals- VOC's are commonly used in industrial and manufacturing processes. Vocs include p-Isopropyltoluene, Chloromethane, Dichlorodifluoromethane, Bromomethane, Chlorethane, Fluorotrichloromethane, Hexachlorobutadiene, Naphthalene, 1,2,4-Trichlorobenzene, Cis-1,2-Dichloroethylene, Dibromomethane, 1,1-Dichloropropene, 1,3-Dichloropropane, 1,3-Dichloropropene, 1,2,3-Trichloropropane, 2,2Dichloropropane, 1,2,4-Trimethylbenzene, 1,2,3-Trichlorobenzene, n-Butylbenzene, 1,3,5-Trimethylbenzene, TertButylbenzene, Sec-Butylbenzene, Bromochloromethane, Chloroform, Bromoform, Bromodichloromethane, Chlorodibromomethane, Xylenes(Total), Dichloromethane, o-Chlorotoluene, p-Chlorotoluene, m-Dichlorobenzene, oDichlorobenzene, p-Dichlorobenzene, Vinyl Chloride, 1,21,-Dichloroethylene, 1,1-Dichloroethane, Trans-1,2Dichloroethylene, 1,2-Dichloroethane, 1,1,1-Trichloroethane, Carbon Tetrachloride, 1,2-Dichloropropane, Trichloroethylene, 1,1,2-Trichloroethane, 1,1,1,2-Tetrachloroethane, Tetrachloroethylene, 1,2,2-Tetrachloroethane, Chlorobenzene, Benzene, Toluene, Ethylbenzene, Bromobenzene, Isopropylbenze, Styrene, and n-Propylbenzene.

Public and education tours of the Richmond County Water Treatment Plant may be arranged by calling 910-997-8339

Right-To-Know Additions to the Consumer Confidence Report

- **2014 Notice to the Public 4th Quarter LRAA for TTHM's**
- **2014 Notice to the Public 4th Quarter LRAA for HAA5's**
- **2013/2014 Notice to the Public Missed Required Sampling for TTHM, HAA5, and Dalapon**

NOTICE TO THE PUBLIC

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Richmond County Water System Has Levels of Total Trihalomethanes (TTHMs) Above Drinking Water Standards

Our water system recently violated a drinking water standard. Although this is not an emergency, as our customers, you have a right to know what happened, what you should do, and what we are doing to correct this situation.

We routinely monitor for the presence of drinking water contaminants. Monitoring results for water samples collected during the time period ending September 30, 2014 show that the contaminant concentration from one or more sampling locations in our system exceeds the standard or maximum contaminant level (MCL) for Total Trihalomethanes (TTHMs). The standard for TTHMs is 0.080 milligrams per liter (mg/L).

Based on new Drinking Water Standards that are calculated as Locational Running Annual Averages (LRAA) the exceedances in the 3rd quarter 2014 increased the average for some of the sampling locations in the system. Even though monitoring results for water samples collected during the time period ending December 31, 2014 had returned to normal, the sample location with the highest average level (LRAA) of Total Trihalomethanes (TTHM) had a concentration of 0.084 mg/L.

What should I do?
You do not need to use an alternative (e.g., bottled) water supply. However, if you have specific health concerns, consult your doctor.

What does this mean?
This is not an immediate risk. If it had been, you would have been notified immediately. However, ***some people who drink the water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous system, and may have an increased risk of getting cancer.***

What happened? What is being done? When will the problem be corrected?
The Richmond County Water System has implemented several corrective actions that have been effective and returned the TTHM level in all areas of the system below the standard for the December 2014 sampling. Those include: reduced chlorine usage, regular flushing of system water lines and close monitoring of water tank levels.

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, please contact:

Responsible Person	System Name	System Address (Street)
Matthew Locklear	Richmond County Water System	326 Old Charlotte Hwy.
Phone Number 910-997-8339	System PWSID # NC0377109	Rockingham, N.C. 28380

Violation Awareness Date: March 2, 2015
Date Notice Distributed: March 27, 2015 **Method of Distribution: Online posting**

Public Notification Certification:

The public water system named above hereby affirms that public notification has been provided to its consumer in accordance with all delivery, content, format, and deadline requirements specified in 15A NCAC 18C .1523.

Owner/Operator:	BRIAN R. LAND	3-23-15
(Signature)	(Print Name)	(Date)

NOTICE TO THE PUBLIC

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Richmond County Water System Has Levels of Haloacetic Acids (HAA) Above Drinking Water Standards

Our water system recently violated a drinking water standard. Although this is not an emergency, as our customers, you have a right to know what happened, what you should do, and what we are doing to correct this situation.

We routinely monitor for the presence of drinking water contaminants. Monitoring results for water samples collected during the time period ending September 30, 2014 show that the contaminant concentration from one or more of the sampling locations in our water system exceeds the standard or maximum contaminant level (MCL) for Total Haloacetic Acids (HAA). The standard for HAA is 0.060 mg/l.

Based on new Drinking Water Standards that are calculated as Locational Running Annual Averages (LRAA) the exceedances in the 3rd quarter 2014 increased the average for some of the sampling locations in the system. Even though monitoring results for water samples collected during the time period ending December 31, 2014 had returned to normal, the sample location with the highest average level (LRAA) of Total Haloacetic Acids (HAA) had a concentration of 0.068 mg/L.

What should I do?
You do not need to use an alternative (e.g., bottled) water supply. However, if you have specific health concerns, consult your doctor.

What does this mean?
This is not an immediate risk. If it had been, you would have been notified immediately. However, ***some people who drink the water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer***.

What happened? What is being done? When will the problem be corrected?
The Richmond County Water System has implemented several corrective actions that have been effective and returned the HAA level in all areas of the system below the standard for the December 2014 sampling. Those include: reduced chlorine usage, regular flushing of system water lines and close monitoring of water tank levels.

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, please contact:

Responsible Person Matthew Locklear	System Name Richmond County Water System	System Address (Street) 326 Old Charlotte Hwy.
Phone Number 910-997-8339	System PWSID # NC0377109	System Address (City, State, Zip) Rockingham, N.C. 28380

Violation Awareness Date: March 2, 2015

Date Notice Distributed: March 27, 2015 **Method of Distribution: Online Posting**

Public Notification Certification:

The public water system named above hereby affirms that public notification has been provided to its consumers in accordance with all delivery, content, format, and deadline requirements specified in 15A NCAC 18C .1523.

Owner/Operator: _____ BRYAN R. LAND _____ 3-23-15
(Signature) (Print Name) (Date)

NOTICE TO THE PUBLIC

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

RICHMOND COUNTY WATER SYSTEM Has Not Met Monitoring Requirements

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(s) 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	SAMPLING FREQUENCY	WHEN SAMPLES WERE TAKEN (Returned to Compliance)
DALAPON	P01	10/1/14	QT	3/20/15
TTHM and HAA5	D01	7/1/13	QT	5/13/14
TTHM and HAA5	D01	4/1/13	QT	5/13/14

** See back of this notice for further information on contaminants

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

What is being done? Sampling schedules for TTHM, HAA, and Dalapon have been updated and corrected and we are currently sampling for each on a quarterly basis.

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, please contact:

Owner Contact RICHMOND, COUNTY OF	System Name Richmond County Water System	System Address (Street) PO BOX 504 ATTN BRYAN LAND
Phone Number 910-997-8234	System PWSID # NC0377109	System Address (City, State, Zip) Rockingham, N.C. 28380-0504

Violation Awareness Date: March 2, 2015

Date Notice Distributed: March 27, 2015 **Method of Distribution: Mail and Online Posting**

Public Notification Certification:

The public water system named above hereby affirms that public notification has been provided to its consumers in accordance with all delivery, content, format, and deadline requirements specified in 15A NCAC 18C .1523.

Owner/Operator: _____ BRYAN R. LAND 3-23-15

(Signature) (Print Name) (Date)

Contaminant Group List

(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.

Instructions for Completing the Notice/Certification Form & for Performing Public Notice for Tier 3 Monitoring Violations

1. **Complete ALL the missing information on the "Notice to the Public."** (Note: Under the section of the notice entitled "What is being done?" describe corrective actions you took, or are taking. You may choose the appropriate language below, or develop your own:
   - We have since taken the required samples, as described in the last column of the table above. The sample results showed we are meeting drinking water standards.
   - We have since taken the required samples, as described in the last column of the table above. The sample for [contaminant] exceeded the limit. [Describe corrective action; use information from public notice prepared for violating the limit.]
   - We plan to take the required samples soon, as described in the last column of the table above.

2. **Provide public notification to your customers as soon as reasonably possible after you learn of the violation as follows:**

Community systems must use one of the following: • Hand or direct delivery • Mail, as a separate notice or included with the bill **For community systems**, this notice is appropriate for insertion in an annual notice or the Consumer Confidence Report (CCR), as long as public notification timing and delivery requirements are met [CFR 141.204(d)].	**Non-community** systems must use one of the following: • Posting in conspicuous locations • Hand delivery • Mail **For non-community systems**, if you post the notice, it must remain posted as long as the violation or situation persists; in no case should the notice be posted less than 7 days, even if the violation is resolved. [CFR 141.204(b)].
(Note: **Both** community and non-community systems must use *another* method reasonably calculated to reach others **IF** they would not be reached by one of the required methods listed above [CFR 141.204(c)]. Such methods could include newspapers, e-mail, or delivery to community organizations.	

   - **Both sides of this public notice/certification MUST be delivered to the persons served by the water system** in order for your customers to have access to the required **Contaminant Group List.**
   - If you mail, post, or hand deliver, print your notice on letterhead, if available.
   - Notify new billing customers or units prior to or at the time their service begins.
   - Provide multi-lingual notifications if 30% of the residents served are non-English speaking.
   - Should you decide not to use this enclosed notice and develop your own version instead, the mandatory language in ***bold italics*** may not be altered and you MUST include the ten required elements listed in CFR 141.205. A separate Public Notification Certification Form that is available on our web site or the certification located at the bottom of the sample notice provided MUST also be submitted.

3. **After issuing the "Notice to the Public" to your customers, sign and date the "Public Notification Certification" at the bottom of the notice. Mail the completed public notice/certification form to the Public Water Supply Section, ATTN: Public Notification**