

# 2014 Annual Drinking Water Quality Report

## Eastern Pines Water Corporation

PWSID# 04-74-015

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 sources 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. **If you have any questions about this report or concerning your water, please contact Barry Sutton at 252-752-7420. We want our valued customers to be informed about their water utility.**

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. Eastern Pines Water Corporation (EPWC) 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.

The water that is used by EPWC is purchased water from the Neuse Regional Water and Sewer Authority (NRWASA) and from 10 wells located in the Southeastern Portion of Pitt County.

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 EPWC 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:
Well # 2, #5, #6, #7, #8, #9, #12	Lower	March 15, 2010
Well #3, #10, #11	Moderate	March 15, 2010
Neuse River	Higher	June 2014

The complete SWAP Assessment report for EPWC may be viewed on the Web at: [www.ncwater.org/pws/swap](http://www.ncwater.org/pws/swap). 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](mailto:swap@ncdenr.gov). 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 919-707-9098.

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.

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 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 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.

**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 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.

**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 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.

**Inorganic Contaminants**

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	Range Low High	MCL G	MCL	Likely Source of Contamination
Fluoride (ppm)	6/10/14	N	1.2	N/A	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories

**Lead and Copper Contaminants**

Contaminant (units)	Sample Date	Your Water	# of sites found above the AL	MCL G	MCL	Likely Source of Contamination
Copper (ppm) (90 <sup>th</sup> percentile)	9/12	0.230	0	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb) (90 <sup>th</sup> percentile)	9/12	0.017	0	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits

**Radioactive Contaminants**

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	MCLG	MCL	Likely Source of Contamination
Alpha emitters (pCi/L)	5/1/12	N	0.9	N	15	Erosion of natural deposits
Combined radium (pCi/L)	5/1/12	N	0.26	N	5	Erosion of natural deposits

**Disinfectants and Disinfection Byproducts Contaminants Sample Site B01**

Contaminant (units)	MCL/MRDL Violation Y/N	Your Water (AVG)	Range Low High	MCLG	MCL	Likely Source of Contamination
TTHM (ppb) [Total Trihalomethanes]	N	26.5	17-33	N/A	80	Byproduct of drinking water chlorination
HAA5 (ppb) [Total Haloacetic Acids]	N	23.5	16-32	N/A	60	Byproduct of drinking water disinfection

**Disinfectants and Disinfection Byproducts Contaminants Sample Site B02**

Contaminant (units)	MCL/MRDL Violation Y/N	Your Water (AVG)	Range Low High	MCLG	MCL	Likely Source of Contamination
TTHM (ppb) [Total Trihalomethanes]	N	15.0	8-25	N/A	80	Byproduct of drinking water chlorination
HAA5 (ppb) [Total Haloacetic Acids]	N	9.75	2-19	N/A	60	Byproduct of drinking water disinfection

**Disinfectants and Disinfection Byproducts Contaminants Sample Site B03**

Contaminant (units)	MCL/MRDL Violation Y/N	Your Water (AVG)	Range Low High	MCLG	MCL	Likely Source of Contamination
TTHM (ppb) [Total Trihalomethanes]	N	25.25	18-29	N/A	80	Byproduct of drinking water chlorination
HAA5 (ppb) [Total Haloacetic Acids]	N	22.0	17-27	N/A	60	Byproduct of drinking water disinfection

**Disinfectants and Disinfection Byproducts Contaminants Sample Site B04**

Contaminant (units)	MCL/MRDL Violation Y/N	Your Water (AVG)	Range Low High	MCLG	MCL	Likely Source of Contamination
TTHM (ppb) [Total Trihalomethanes]	N	12.0	6-25	N/A	80	Byproduct of drinking water chlorination
HAA5 (ppb) [Total Haloacetic Acids]	N	9.0	3-19	N/A	60	Byproduct of drinking water disinfection

**Other Miscellaneous Water Characteristics Contaminants**

Contaminant (units)	Sample Date	Your Water	Range Low/High	SMCL
Manganese (ppm)	6/10/14	0.002	0.0-0.013	0.05 mg/L
Sodium (ppm)	6/10/14	105.69	72.19-179.4	N/A
Sulfate (ppm)	6/10/14	10.74	0.0-24.0	250 mg/L
pH	6/10/14	7.9	7.4-8.2	6.5 to 8.5

**UCMR (Unregulated Contaminant Monitoring Rule) Data**

Substances (ppb)	Highest Level Detected	Range Detected	Description and Origin of Substance
Chlorate	370	110-370	Agricultural defoliant or desiccant; disinfectant byproduct; and used in production of chlorine dioxide
Hexavalent Chromium (Dissolved)	0.10	0.037-0.10	Natural occurring element; used in steel making and other alloys; chromium -3 or -6 forms are used for chrome plating, dyes and pigments, leather tanning, and wood preservation
Strontium	51	36-51	Natural occurring element; commercial use of strontium has been in the faceplate glass or cathode ray tube televisions to block x-ray emissions
Vanadium	0.68	0.25-0.68	Naturally occurring elemental metal; used as vanadium pentoxide, which is a chemical intermediate and catalyst
1,4-Dioxane	0.0900	0.0900	Stabilizer used in storage and transport of aluminum containers; solvent in inks and adhesives, byproduct of producing ingredients found in cleansing and moisturizing products

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## Neuse Regional Water and Sewer Authority

### 2014 Detected Contaminants

Substances (Measuring Units)	Highest Level Allowed [MCL]	Highest Level Detected	Range Detected	Description and Origin of Substance
Sodium (ppm)	n/a	20.7	20.7	Naturally occurring mineral; also a byproduct of disinfection processes.
Fluoride (ppm)	4	0.89	0.60 - 0.89	Natural occurring mineral; also added to water to promote dental health.
Sulfate (ppm)	n/a	26	26	Natural occurring mineral; also a byproduct of conventional water treatment.
Total Organic Carbon Raw (ppm)	TT*	10.6	5.1 - 10.6	Organic matter naturally present in the environment.
Total Organic Carbon Treated (ppm)	TT*	4.2	2.1 - 4.2	Organic matter naturally present in the environment.
Turbidity (NTU)	1.0 and 95% of samples below 0.3 (Treatment Technique)	0.38 and 99 % of samples below 0.3	n/a	Measure of cloudiness in water; may be caused by inorganic soil particles or fragments of organic matter that can interfere with treatment.
pH (units)	9.0	8.3	7.4 - 8.3	Measure of the acidity of water, with acidity decreasing with increasing pH value; pH scale ranges 0-14.

TT = Treatment Technique

### UCMR ( Unregulated Contaminant Monitoring Rule) Data

Substances (ppb)	Highest Level Detected	Range Detected	Description and Origin of Substance
Chlorate	260	79-260	Agricultural defoliant or desiccant; disinfectant by product; and used in production of chlorine dioxide
Chromium 6 or Hexavalent Chromium	0.07	0.04 - 0.07	Natural occurring element; used in steel making and other alloys; chromium-3 or -6 forms are used for chrome plating, dyes and pigments, leather tanning, and wood preservation.
Chromium (total)	0.2	0.2	Natural occurring element; used in steel making and other alloys; chromium-3 or -6 forms are used for chrome plating, dyes and pigments, leather tanning, and wood preservation.
Strontium	52	44 - 52	Natural occurring element; commercial use of strontium has been in the faceplate glass of cathode ray tube televisions to block x-ray emissions.
Vanadium	0.5	0.5	Naturally occurring elemental metal; used as vanadium pentoxide, which is a chemical intermediate and catalyst.
1,4-Dioxane	0.23	0.23	Stabilizer used in storage and transport of aluminum containers; solvent in inks and adhesives, byproduct of producing ingredients found in cleansing and moisturizing products.