2014

WATER QUALITY REPORT

(Consumer Confidence Report)

CITY OF ALEXANDRIA WATER SYSTEM

Public Water Supply ID: LA1079001

The Water We Drink

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We are pleased to present to you the Annual Water Quality Report for the year 2014. This report is designed to inform you about the quality of your water and services we deliver to you every day *(Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien).* 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.

Terms to help you understand this report

In this report, you may find some terms and abbreviations you might not be familiar with. To help you better understand these terms, we've provided the following definitions:

Microbial Contaminants – such as viruses and bacteria, that may enter the water supply from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Inorganic Contaminants – such as salts and metals, many which may be naturally-occurring in groundwater. They may also result from urban storm water runoff; industrial, or domestic wastewater discharges, oil and gas production, mining, or farming.

Pesticides and Herbicides – 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.

Radioactive Contaminants – can be naturally-occurring or be the result of oil and gas production and mining activities.

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.

Picocuries per liter (pCi/L) – picocuries per liter is a measure of the radioactivity in water.

Action level (AL) – the concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

Maximum contaminant level (MCL) – the "Maximum Allowed" MCL is the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.

Maximum contaminant level goal (MCLG) – the "Goal" is the level of a contaminant in drinking water below which there is no known or expected risk to human health. MCLG's allow for a margin of safety.

Locational Running Annual Average (LRAA) – the running average of 4 consecutive results from quarterly monitoring.

Where does the City of Alexandria get its water?

All of our water comes from local wells tapping into the naturally occurring ground water system underlying Rapides Parish. The majority of this water is drawn from the Williamson Creek, Carnahan Bayou, and Chicot aquifers. Wells are located within the city limits (14 active wells) and in nearby Kisatchie National Forest (32 active wells).

Source Name			
WELL R 425	WELL R 915	WELL R 930	WELL R 1356
WELL R 464	WELL R 916	WELL R 932	WELL R 1357
WELL R 612	WELL R 918	WELL R 933	WELL R 1406
WELL R 748	WELL R 920	WELL R 934	WELL R 1430
WELL R 875	WELL R 921	WELL R 936	WELL R 1431
WELL R 905	WELL R 922	WELL R 937	WELL R 1432
WELL R 906	WELL R 923	WELL R 1202	WELL R 1475
WELL R 907	WELL R 924	WELL R 1209	WELL R 1542
WELL R 909	WELL R 925	WELL R 1210	WELL R 1543
WELL R 910	WELL R 927	WELL R 1292	WELL R 1566
WELL R 912	WELL R 928	WELL R 1329	
WELL R 914	WELL R 929	WELL R 1343	

What steps does the City of Alexandria take to ensure our water is safe to drink?

The sources of all drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of 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.

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. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

The most effective safeguard against contaminants is to protect the water supply from contamination when at all possible. A Source Water Assessment Plan (SWAP) is available from our office. This plan is an assessment of a delineated area around our listed sources through which contaminants, if present, could migrate and reach our source water. It also includes an inventory of potential sources of contamination within the delineated area, and a determination of the water supply's susceptibility to contamination by the identified potential sources. According to the Source Water Assessment Plan, our water system had a susceptibility rating of 'MEDIUM'. If you would like to review the Source Water Assessment Plan, please feel free to contact our office.

1. Contaminants the City of Alexandria Removes

Water is disinfected with low levels of chlorine just before it enters into the water distribution system to remove any possible microbial contaminants like viruses, bacteria, and amoeba. The chlorine lingers at

an even lower level (0.5 parts per million) to insure disinfection as it travels from storage tanks to the tap in your home or business.

Our water system tests a minimum of 60 samples every month in accordance with the Total Coliform Rule for microbiological contaminants.

No microbiological contaminants were detected during the calendar year 2014.

2. Contaminants the City of Alexandria Monitors

Unavoidable byproducts of the disinfection process may be of concern if their levels are too high in the water system. We monitor two groups of byproducts, total trihalomethanes (TTHM) and haloacetic acid (HAA5), at four sample points representative of the entire system.

Throughout 2014, the levels of TTHM and HAA5 in our system remained well below the established limits of 80 ppb and 60 ppb, respectively.

Disinfection Byproducts	Sample Point	Period	Highest LRAA	Range	Unit	MCL	MCLG	Typical Source
HAA5	107 PARKWOOD STREET	2014	6	0 - 0	ppb	60	0	By-product of drinking water disinfection
HAA5	145 ST ANDREWS	2014	4	0 - 6.44	ppb	60	0	By-product of drinking water disinfection
HAA5	2125 AIRBASE ROAD	2014	7	0 - 0	ppb	60	0	By-product of drinking water disinfection
HAA5	439 CHICKAMAW RD	2014	2	1.5 - 1.5	ppb	60	0	By-product of drinking water disinfection
HAA5	6750 OLD BATON ROUGE HWY	2014	0	0 - 0	ppb	60	0	By-product of drinking water disinfection
HAA5	HWY 1 NORTH	2014	1	1.4 - 1.4	ppb	60	0	By-product of drinking water disinfection
TTHM	107 PARKWOOD STREET	2014	25	12.3 - 22.6	ppb	80	0	By-product of drinking water chlorination
TTHM	145 ST ANDREWS	2014	32	12.5 - 31.6	ppb	80	0	By-product of drinking water chlorination
TTHM	2125 AIRBASE ROAD	2014	32	21 - 30.3	ppb	80	0	By-product of drinking water chlorination
TTHM	439 CHICKAMAW RD	2014	3	2.5 - 2.5	ppb	80	0	By-product of drinking water chlorination
TTHM	6750 OLD BATON ROUGE HWY	2014	13	7.6 - 16.6	ppb	80	0	By-product of drinking water chlorination
TTHM	HWY 1 NORTH	2014	8	8.1 - 8.1	ppb	80	0	By-product of drinking water chlorination

3. Contaminants the State of Louisiana Monitors

Vigilant monitoring for contaminants further ensures the quality of the water. The Louisiana Department of Health and Hospitals - Office of Public Health routinely monitors for constituents in your drinking water according to Federal and State laws. The tables that follow show the results of our monitoring during the period of January 1st to December 31st, 2014. 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.

During the period covered by this report (1/1/2014 - 12/31/2014) we exceeded the secondary maximum contaminant level for only one contaminant: fluoride.

The City of Alexandria Water Department operates 46 water wells which supply water to its customers through nine (9) distribution points (points of entry) throughout the City. The Louisiana Department of Health and Hospitals notified the City that, during 2014, water samples taken directly from two (2) points of entry slightly exceeded the recommended limit of fluoride. Because of this exceedance, the City of Alexandria was required to notify the public which it did via a mail insert with the February utility bill. The fluoride in the City's water is naturally occurring; it is not added during the water treatment process. Many of the City's points of entry have fluoride levels well below the 2.0 mg/l limit; therefore, the blended water delivered to our customers normally is well below the 2.0 mg/l limit.

The City of Alexandria recognizes the importance of the quality and safety of your water supply. The City is continually monitoring fluoride levels to ensure they are maintained within recommended limits. Rest assured your water is safe and represents no health hazard.

During the period covered by this report (1/1/2014 - 12/31/2014) all other contaminant levels were well below maximum contaminant levels established by the EPA.

In the tables below, we have shown the chemical contaminants that were detected. Chemical Sampling of our drinking water may not be required on an annual basis; therefore, information provided in this table refers back to the latest year of chemical sampling results.

Inorganic Contaminants:

Regulated Contaminants	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
ARSENIC	7/8/2013	5	1 - 5	ppb	10	0	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
FLUORIDE	2/26/2014	2.3	0.6 - 2.3	ppm	4	4	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories

Organic Contaminants:

Regulated Contaminants	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
DI(2-ETHYLHEXYL) PHTHALATE	5/6/2013	1.46	0.51 - 1.46	ppb	6	0	Discharge from rubber and chemical factories
HEXACHLOROBENZENE	4/8/2013	0.152	0.057 - 0.152	ppb	1	0	Discharge from metal refineries and agricultural chemical factories
PENTACHLOROPHENOL	4/8/2013	0.129	0.129	ppb	1	0	Discharge from wood preserving factories

Radioactive Contaminants:

Radionuclides	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
COMBINED URANIUM	4/22/2013	1	1	µg/l	30		Erosion of natural deposits

GROSS ALPHA PARTICLE ACTIVITY	8/28/2013	10	10	pCi/l	15	Erosion of natural deposits

Lead and Copper Contaminants:

Lead and copper pipes in older homes may discharge some level of these contaminants to drinking water, even though the water supplying the home meets EPA standards for these metals.

During the period covered by this report (1/1/2014 - 12/31/2014) lead and copper levels were well below action levels established by the State and the EPA.

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. CITY OF ALEXANDRIA 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 water tested by a private laboratory. 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.**

A **green or blue-green stain on kitchen or bathroom fixtures is caused by tiny amounts of copper** that dissolve in your home's copper plumbing system when the water sits unused overnight. Copper staining may be the result of a leaky faucet or a faulty toilet flush valve, so be sure your plumbing is in good working order. Copper stains may also be caused by overly hot tap water. Generally speaking, you should maintain your water temperature at a maximum of 120 degrees Fahrenheit. Lowering your water temperature will reduce the staining problem and save you money on your energy bill. Flushing the tap for a minute or so before using the water will also help reduce copper staining.

Lead and Copper	Date	90TH Percentile	Range	Unit	AL	Sites Over AL	Typical Source
COPPER, FREE	2011 - 2013	0.4	0.1 - 0.7	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD	2011 - 2013	3	1 - 17	ppb	15	0	Corrosion of household plumbing systems; Erosion of natural deposits

Environmental Protection Agency Required Health Effects Language

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).

Additional Required Health Effects Language:

The following language is mandatory and required by the Environmental Protection Agency (EPA) and the Louisiana Department of Health and Hospitals (DHH). This alert, referred to below, is the same notification that was mailed out with the February utility bill. The City of Alexandria does not endorse this language and does not agree it accurately describes the quality of the water delivered to your home.

This is an alert about your drinking water and a cosmetic dental problem that might affect children under nine (9) years of age. At low levels, fluoride can help prevent cavities, but children drinking water containing more than two (2) milligrams per liter (mg/L) of fluoride may develop cosmetic discoloration of their permanent teeth (dental fluorosis). The drinking water provided by your community water system has a fluoride concentration greater than 2.0 mg/L. Dental fluorosis, in its moderate or severe forms, may result in a brown staining and/or pitting of the permanent teeth. This problem occurs only in developing teeth, before they erupt from the gums. Children under nine (9) should be provided with alternative sources of drinking water or water that has been treated to remove the fluoride to avoid the possibility of staining and pitting of their permanent teeth. You may also want to contact your dentist about proper use by young children of fluoride-containing products. Older children and adults may safely drink the water. Drinking water containing more than four (4) mg/L of fluoride (the maximum contaminant level for fluoride) can increase your risk of developing bone disease. Your drinking water does not contain more than four (4) mg/L of fluoride, but we are required to notify you when we discover that the fluoride levels in your drinking water exceed two (2) mg/L because of this cosmetic dental problem. For more information, please call at the phone number located under the heading "How might I become actively involved?" on page 1 of this report. Some home water treatment units are also available to remove fluoride from drinking water. To learn more about available home water treatment units, you may call NSF International at 1-877-8-NSF-HELP.

We at the CITY OF ALEXANDRIA WATER SYSTEM work around the clock to provide top quality drinking water to every tap. We want our valued customers to be informed about their water utility. If you have any questions about this report or simply want to learn more about your drinking water, please contact the Mayor's Office at 318-449-5000. We ask that all our customers help us protect and conserve our water sources, which are the heart of our community, our way of life, and our children's future.