ANNUAL WATER OUALITY REPORT

WATER TESTING PERFORMED IN 2015



Presented By Water Works District No. 3 of Rapides Parish

Meeting the Challenge

Once again we are proud to present our annual drinking water report, covering all drinking water testing performed between January 1 and December 31, 2015. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal standards. We continually strive to adopt new methods for delivering the best-quality drinking water to your homes and businesses. As new challenges to drinking water safety emerge, we remain vigilant in meeting the goals of source water protection, water conservation, and community education while continuing to serve the needs of all of our water users.

As our progress continues in 2016, the board of commissioners has approved over 9 million dollars of improvements to our water system, some of which are as follows: We are currently in the process of replacing our old steel ground storage tanks at our water treatment plant with two new 750,000 gallon concrete tanks. The concrete tanks require less maintenance than a conventional steel tank, so it will be a cost savings to the district in the future. In addition, we will soon be installing new treatment vessels on two of our wells at Camp Beauregard. This new treatment process will ensure the safest and cleanest drinking water for years to come.

We produced just over 1 billion gallons of water to our customers in 2015, with hundreds of compliance tests run, with zero deficiencies being found in these tests.

In our efforts to further strengthen our water distribution system, the district's line laying crew has completed installing new water lines on Kinley Road, Second Street, Third Street, and Cemetery Road, as a part of the continuing effort to bring our entire distribution system up to the high standards that our customers expect. Also over the past year, Water Works District No. 3 acquired the Springhill Water Works; as a result, Water Works District No.3 acquired all of Springhill's infrastructure and customers.

Water Works District No. 3 is also aware that with the scare of the Flint, Michigan, water crisis, people can become concerned about the water they drink. Please rest assured that we take this very serious, and that we constantly monitor and test our water, from the source to our last customer, to ensure the safest water for you and your family.

Louisiana DHH also tested for Naegleria fowleri several times over the last year, and we're proud to report that there were zero findings.

Please remember that we are always available to assist you should you have any questions or concerns about your water.

A friendly reminder to our customers: We read our meters through radio frequency technology. This allows us to collect the meter reading while simply driving down the street, eliminating the need to stop, get out, and open each meter box. This technology was implemented to be more efficient and cost-effective.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as those with cancer undergoing chemotherapy, those who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers.

The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or http://water.epa.gov/ drink/hotline.



Board of Commissioners

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Substances That Could Be in Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

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, in some cases, radioactive material, and substances resulting from the presence of animals or from human activity. Substances 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, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may 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 may also come from gas stations, urban stormwater runoff, and septic systems;

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

Community Participation

You are invited to participate in our public forum and voice your concerns about your drinking water. We meet the second and fourth Tuesday of each month beginning at 10:00 a.m. at the Water Works Office, 1306 Third Street, Pineville, Louisiana. Call (318) 640-1379 for additional information.



Where Does My Water Come From?

Our primary water source consists of six groundwater wells and a surface water purification plant that is fed by Big Creek, near Pollock, Louisiana.

We now have a Source Water Protection Plan available from our office that provides more information, such as potential sources of contamination to the water supply. This assessment includes a delineated area around our wells or intakes through which contaminants, if present, could migrate and reach our source water. It also includes an inventory of potential sources of contamination within these delineated areas and a determination of the water supply's susceptibility to contamination by the identified potential sources. The overall susceptibility rating for our water source is Medium. A susceptibility rating of Medium does not imply poor water quality; rather, it signifies the system's potential to become contaminated within the assessment area.

QUESTIONS?

For more information about this report, or for any questions relating to your drinking water, please call Jimmy R. French, General Manager, at (318) 640-1379.

Please visit our new and improved website at www.wwd3.com! You can view or pay your bill, set up a new service, sign up for updates by email, or just keep up with ongoing projects. You can still pay by phone with a credit card or mail your payment to P.O. Box 580, Tioga, LA 71477.

Benefits of Chlorination

Disinfection, a chemical process used to control disease-causing microorganisms by killing or inactivating them, is unquestionably the most important step in drinking water treatment. By far the most common method of disinfection in North America is chlorination.

Before communities began routinely treating drinking water with chlorine (starting with Chicago and Jersey City in 1908), cholera, typhoid fever, dysentery, and hepatitis A killed thousands of U.S. residents annually. Drinking water chlorination and filtration have helped to virtually eliminate these diseases in the U.S. Significant strides in public health are directly linked to the adoption of drinking water chlorination. In fact, the filtration of drinking water plus the use of chlorine is probably the most significant public health advancement in human history.

How chlorination works:

Potent Germicide Reduction in the level of many disease-causing microorganisms in drinking water to almost immeasurable levels.

Taste and Odor Reduction of many disagreeable tastes and odors like foul-smelling algae secretions, sulfides, and odors from decaying vegetation.

Biological Growth Elimination of slime bacteria, molds, and algae that commonly grow in water supply reservoirs, on the walls of water mains, and in storage tanks.

Chemical Removal of hydrogen sulfide (which has a rotten egg odor), ammonia, and other nitrogenous compounds that have unpleasant tastes and hinder disinfection. It also helps to remove iron and manganese from raw water.



Lead in Home Plumbing

f 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. We are responsible for providing high-quality drinking water, but we 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 www.epa.gov/lead.

Failure in Flint

The national news coverage of water conditions in Flint, Michigan, has created a great deal of confusion and consternation over the past year. The water there has been described as being corrosive; images of corroded batteries and warning labels on bottles of acids come to mind. But is corrosive water necessarily bad?

Corrosive water can be defined as a condition of water quality that will dissolve metals (iron, lead, copper, etc.) from metallic plumbing at an excessive rate. There are a few contributing factors but, generally speaking, corrosive water has a pH of less than 7; the lower the pH, the more acidic, or corrosive, the water becomes. (By this definition, many natural waterways throughout the country can be described as corrosive.) While all plumbing will be somewhat affected over time by the water it carries, corrosive water will damage plumbing much more rapidly than water with low corrosivity.

By itself, corrosive water is not a health concern; your morning glass of orange juice is considerably more corrosive than the typical lake or river. What is of concern is that exposure in drinking water to elevated levels of the dissolved metals increases adverse health risks. And there lies the problem.

Public water systems are required to maintain their water at optimal conditions to prevent it from reaching corrosive levels. Rest assured that we routinely monitor our water to make sure that what happened in Flint NEVER HAPPENS HERE. For more information on how corrosivity affects water quality, download this informative pamphlet: http://goo.gl/KpTmXv.



Sampling Results

During the past year, we have taken hundreds of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants. The tables below show only those contaminants that were detected in the water. The state requires us to monitor for certain substances less often than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

We participated in the 3rd stage of the EPA's Unregulated Contaminant Monitoring Rule (UCMR3) program by performing additional tests on our drinking water. UCMR3 benefits the environment and public health by providing the EPA with data on the occurrence of contaminants suspected to be in drinking water, in order to determine if the EPA needs to introduce new regulatory standards to improve drinking water quality. Contact us for more information on this program.

REGULATED SUBSTANCES								
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE	
Fluoride (ppm)	2015	4	4	0.06	NA	No	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories	
Haloacetic Acids [HAAs] (ppb)	2015	60	NA	31	18-45	No	By-product of drinking water disinfection	
TTHMs [Total Trihalomethanes] (ppb)	2015	80	NA	11	3.8–21	No	By-product of drinking water disinfection	
Turbidity ¹ (NTU)	2015	TT	NA	0.06	0.02-0.06	No	Soil runoff	
Turbidity (Lowest monthly percent of samples meeting limit)	2015	TT = 95% of samples < 0.3 NTU	NA	100	NA	No	Soil runoff	

Tap water samples were collected for lead and copper analyses from sample sites throughout the community.

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH%TILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2014	1.3	1.3	0.3	0/30	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2014	15	0	4	0/30	No	Corrosion of household plumbing systems; Erosion of natural deposits

SECONDARY SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	MCLG	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Iron (ppb)	2015	300	NA	0	NA	No	Leaching from natural deposits; Industrial wastes
Manganese (ppb)	2015	50	NA	38	NA	No	Leaching from natural deposits
pH (Units)	2015	6.5–8.5	NA	7.6	NA	No	Naturally occurring

UNREGULATED CONTAMINANT MONITORING RULE PART 3 (UCMR3)

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE (LOW-HIGH)
Bromomethane (ppb)	2014	0.136	NA
Chlorate (ppb)	2014	222.95	NA
Chloromethane (ppb)	2014	0.156	NA
Chromium (ppb)	2014	0.208	NA
Chromium, Hexavalent (ppb)	2014	0.051	NA
Strontium (ppb)	2014	16.494	NA
Vanadium (ppb)	2014	0.106	NA

¹Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of the effectiveness of the filtration system.

Definitions

AL (Action Level): The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

LRAA (Locational Running Annual

Average): The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters. Amount Detected values for TTHMs and HAAs are reported as LRAAs.

MCL (Maximum Contaminant Level): 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.

MCLG (Maximum Contaminant Level

Goal): 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.

MRDL (Maximum Residual Disinfectant

Level): 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.

MRDLG (Maximum Residual Disinfectant

Level Goal): 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.

NA: Not applicable

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of

water. Turbidity in excess of 5 NTU is just noticeable to the average person.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

SMCL (Secondary Maximum Contaminant Level): SMCLs are established to regulate the aesthetics of drinking water like taste and odor.

TT (Treatment Technique): A required process intended to reduce the level of a contaminant in drinking water.