Annual Drinking Water Quality Report

PWSID IN5216003

Lake Santee Regional Waste & Water District

13 SW Wrenn Parkway, Greensburg, IN 47240 (812-527-2943)

We are pleased to present to you the Annual Water Quality Report for 2019. This report is designed to inform you about the quality water and services we deliver to you every day. 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. The water treatment plant is supplied water directly from Lake Santee. The raw water is pre-treated with an oxidizer, filtered, run through a granular activated carbon column, chlorinated, fluoridated, and finally, phosphates are added for corrosion control. No source water assessments have been performed.

If you have any questions about this report or concerning your water utility, please contact Brandon Litmer, Superintendent at 812-527-2943**.** We want our customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings, held on the third Thursday of each month at 3:30 PM in the Community Room.

Lake Santee RWWD routinely monitors for constituents in your drinking water according to Federal and State laws. The table below shows the results of our monitoring for the period of January 1st to December 31st, 2019. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. It is important to remember that the presence of these contaminants does not necessarily pose a health risk.

In the table you will find terms and abbreviations you might not be familiar with. To help you better understand these terms we have provided the following definitions:

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.

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

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 - 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 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.

Maximum Residual Disinfectant Level (MRDL) – (mandatory language) 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 Disinfectant Level Goal (MRDLG) – (mandatory language) 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 results taken at a particular monitoring location during the previous four calendar quarters.

Below is a table listing all contaminants that were detected during the course of the year. We tested for a total of approximately one hundred (100) contaminants. Of those, only the ones listed below were detected.

TEST RESULTS

Contaminant	Violation Y/N	Highest Level Detected	Unit Of Measure	Range of Levels Detected	MCLG	MCL	Likely Source of contamination
Microbiological Contaminants							
Coliform Bacteria	N	Absent in all samples	Presence / Absence	Absent	0	5% of samples	Naturally present in environment.
Turbidity Maximum Level Lowest Monthly %age	N	 0.14 100%	 NTU	 0.04 to 0.14	 N/A	 TT 95.0%	 Soil runoff
Inorganic Contaminants							
Arsenic (one sample)	N	2	Ppb	1.9 to 1.9	0	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (one sample)	N	0.022	Ppm	0.022 to 0.022	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (one sample)	N	0.8	Ppm	0.8 to 0.8	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Copper – 2018 Results 90^{th} percentile # of samples > AL	N	 0.16 0	Ppm	0.015 to 0.19	1.3	AL= 1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

Lead – 2018 Results 90th percentile # of samples > AL	N	1.9 0	Ppb	<1.0 to 2.5	0	AL= 15	Corrosion of household plumbing systems, erosion of natural deposits
Nitrate (as Nitrogen) One sample	N	0.1	Ppm	0.1 to 0.1	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Radioactive Contaminants							
Gross alpha excluding radon and uranium 2017 Results	N	0.54	pCi/L	0.54 to 0.54	0	15	Erosion of natural deposits
Disinfection By-Products							
TTHM (Total Trihalomethanes)	N	61 (4 Qtr Avg)	Ppb	1.1 to 89.9	No goal for the total	80	By-product of drinking water disinfection
HAA5 (Haloacetic Acids)	**Y**	57 (4 Qtr Avg)	Ppb	0 to 116.8	No goal for the total	60	By-product of drinking water disinfection

Haloacetic Acids (HAA5) Violations

Violation Type	Violation Begin	Violation End	Violation Explanation
MCL, LRAA	04/01/2019	06/30/2019	Water samples showed that the amount of this contaminant was above its standard (MCL) for the period indicated.
MCL, LRAA	07/01/2019	09/30/2019	Water samples showed that the amount of this contaminant was above its standard (MCL) for the period indicated.

Regulated disinfectant	**Date /PERIOD**	**Unit of Measure**	**Levels Detected**			**MRDL**	**MRDLG**	**Likely Sources**
			Min	**Max**	**Level**			
Chlorine	2019	mg/l	0.95	1.55	1.21 Running annual average	4	4	Water additives used to control microbes

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. Lake Santee RWWD 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.

TTHM (Total Trihalomethanes) – 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.

HAA5 (Haloacetic Acids) – Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.

Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts. These byproducts include trihalomethanes (THMs) and haloacetic acids (HAAs). Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects and may lead to an increased risk of getting cancer.

We have learned through our monitoring and testing that some constituents are present. All sources of drinking water are subject to potential contamination by constituents that are naturally occurring or manmade. Those constituents can be micro, organic or inorganic chemicals, or radioactive materials.

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 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, storm water runoff and residential uses.
- Organic chemicals, 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 materials, which can be naturally occurring or be the result of oil and gas production and mining activities.

The presence of contaminants does not necessarily indicate that the 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 at 1-800-426-4791.

MCLs 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.

Thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. These improvements are sometimes reflected as rate structure adjustments. Thank you for understanding.

Some people may be more vulnerable to contaminants in drinking water than the general

population. Immune 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 microbiological contaminants are available from the Safe Drinking Water Hotline at 800-426-4791. Please call our office at 812-527-2943 if you have questions.