

2013 Annual Drinking Water Quality Report

The City of Port St. Joe

*We're pleased to present to you this year's Annual Water Quality Report. We are proud to report we had **no** violations of our primary water quality standards in 2013. 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. Our water source is surface water from the Chipola River Canal. This water is treated by enhanced coagulation and flocculation, clarification, submerged membrane micro-filtration, disinfection, pH adjustment and dosed with a corrosion inhibitor.*

If you have any questions about this report or concerning your water utility, please contact Larry McClamma at 850-229-1421 or Lynn Todd at 850-229-6395. We encourage our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled City commission meetings. They are held on first and third Tuesdays of the month at 6:00 pm in the Commission meeting room at City Hall, 305 Cecil Costin Sr. Blvd.

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 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.

The City of Port St. Joe routinely monitors for contaminants in your drinking water according to Federal and State laws, rules, and regulations. Except where indicated otherwise, this report is based on the results of our monitoring for the period of January 1 to December 31, 2013. Data obtained before January 1, 2013, and presented in this report are from the most recent testing done in accordance with the laws, rules, and regulations.

In the table below, you may find unfamiliar terms and abbreviations. To help you better understand these terms we've provided the following definitions:

Initial Distribution System Evaluation (IDSE): *An important part of the Stage 2 Disinfection Byproducts Rule (DBPR). The IDSE is a one-time study conducted by water systems to identify distribution system locations with high concentrations of trihalomethanes (THMs) and haloacetic acids (HAAs). Water systems will use results from the IDSE, in conjunction with their Stage 1 DBPR compliance monitoring data, to select compliance monitoring locations for the Stage 2 DBPR*

Maximum Contaminant Level or 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 or 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.*

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

Picocurie per liter (pCi/L) - *measure of the radioactivity in water.*

"ND" *means not detected and indicates that the substance was not found by laboratory analysis.*

Parts per million (ppm) or Milligrams per liter (mg/l) – *one part by weight of analyte to 1 million parts by weight of the water sample.*

Parts per billion (ppb) or Micrograms per liter (µg/l) – *one part by weight of analyte to 1 billion parts by weight of the water sample.*

Maximum residual disinfectant level or 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 residual disinfectant level goal or 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.

Nephelometric Turbidity Unit (NTU): measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

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

2013 TEST RESULTS TABLE

Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Radioactive Contaminants							
Alpha emitters (pCi/L)	9/09-5/10	N	0.25(avg)	ND-0.5	0	15	Erosion of natural deposits
Radium 226 or combined radium (pCi/l)	9/09-5/10	N	0.85(avg)	0.1-1.5	0	5	Erosion of natural deposits
Inorganic Contaminants							
Sodium (ppm)	6/13	N	41	NA	N/A	160	Salt water intrusion, leaching from soil
Barium (ppm)	6/13	N	0.015	NA	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm)	6/13	N	0.043	NA	4	4.0	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth when at the optimum level of 0.7 ppm
Nickel (ppm)	6/13	N	3.9	NA	NA	100	Pollution from mining and refining operations. Natural occurrence in soil

Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	AL Exceeded Y/N	90th Percentile Result	No. of sampling sites exceeding the AL	MCLG	AL (Action Level)	Likely Source of Contamination
Lead and Copper (Tap Water)							
Copper (tap water) (ppm)	6-9/12	N	0.17	0 of 60	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	6-9/12	N	1.4	0 of 60	0	15	Corrosion of household plumbing systems, erosion of natural deposits

Stage 1 Disinfectant/Disinfection By-Product (D/DBP)							
Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Chlorine (ppm)	1-12/13	N	1.04	0.83-1.29	MRDLG = 4	MRDL = 4.0	Water additive used to control microbes
Haloacetic Acids (five) (HAA5) (ppb)	1-8/13	N	36.06	16.27-50.19	NA	MCL = 60	By-product of drinking water disinfection
TTHM [Total trihalomethanes] (ppb)	1-8/13	N	75.90	25.3-90.3	NA	MCL = 80	By-product of drinking water disinfection
Stage 2 Disinfectants and Disinfection By-Products *Not applicable until four quarters are sampled.							
Haloacetic Acids (HAA5) (ppb)	11-12/13	NA*	NA*	12.54-51.8	NA	60	By-product of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb)	11-12/13	NA*	NA*	52-85.1	NA	80	By-product of drinking water disinfection

Microbiological Contaminants							
Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL Violation Y/N	The Highest Single Measurement	The Lowest Monthly Percentage of Samples Meeting Regulatory Limits	MCLG	MCL	Likely Source of Contamination
Turbidity (NTU)	1-12/13	N	0.13	100	N/A	TT	Soil runoff

Microbiological Contaminants						
Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL Violation Y/N	Highest Monthly Number	MCLG	MCL	Likely Source of Contamination
Total Coliform Bacteria (positive samples)	1-12/13	N	1	0	For systems collecting fewer than 40 samples per month: presence of coliform bacteria in >1 sample collected during a month.	Naturally present in the environment

Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL Violation Y/N	Highest Result	Range of Results	MCLG	MCL	Likely Source of Contamination
Secondary Contaminants							
Color (color units)	6/13 and 10/13	Y	20	15-20	NA	15	Naturally occurring organics

*The State of Florida Department of Environmental Protection (FDEP) sets drinking water standards for secondary contaminants and has determined that color is an aesthetic concern at certain levels of exposure. Color was sampled in June 2013 and was found higher than the level allowed by the State (an MCL violation). Color was resampled in October 2013 and was not above the MCL. Color as a secondary drinking water contaminant, does **not** pose a health risk. We will continue to sample as required by rule and work with the Department as needed.*

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. The City of Port St. Joe 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:

(A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

(B) 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.

(C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

(D) 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.

(E) Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

*Turbidity is a measure of cloudiness of the water and has no health effects. We monitor it because it is a good indicator of the effectiveness of our filtration system. High turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches. The city had **no** turbidity exceedances in 2013.*

In order to ensure that tap water is safe to drink, the EPA prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Some people who drink water containing trihalomethanes in excess of the MCLs over many years may experience problems with their liver, kidneys, or central nervous systems and may have an increased risk of getting cancer.

The FDEP began conducting statewide assessments of public drinking water systems in 2004. To date, no assessment of this system has been published on the FDEP Source Water Assessment and Protection Program website at www.dep.state.fl.us/swap.

*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 microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).*

We constantly monitor the water supply for various contaminants. We have detected Cryptosporidium in the source water. We detected this contaminant in 6 out of 24 samples tested. We believe it is important for you to know that Cryptosporidium may cause serious illness in 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. These people should seek advice from their health care providers. Please note our filtration system is designed to filter out this type of contaminant.

We at the City of Port St. Joe work diligently to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.

The City of Port St. Joe is committed to insuring the quality of your water. If you have any questions or concerns about the information provided, please feel free to call any of the numbers listed.