JACKSON MUNICIPAL
KY 0130208
WATER QUALITY REPORT FOR YEAR 2015

WATER- ESSENTIAL FOR LIFE

333 BROADWAY
JACKSON, KY 41139

MANAGER: RICK TURNER
CCR CONTACT: CLIFF HAYES (606-666-5272)

MEETINGS: CITY HALL MEETING DATES: FOURTH THURSDAY EACH MONTH TIME: 5:30 PM

SOURCE INFORMATION

This report if designed to inform the public about the quality of water and services provided on a daily basis. Our commitment is to provide our customers with a safe, clean, and reliable supply of drinking water. We want to assure that we will continue to monitor, improve, and protect the water system and deliver a high quality product. Water is the most indispensable product in every home and we ask everyone to be conservative and help us in our efforts to protect the water source and the water system.

Jackson Municipal Water System treats surface water from the North Fork of the Kentucky River. A complete source water assessment is available at the public library in the city of Jackson. An analysis of the susceptibility of the Jackson Water supply to contamination indicates that susceptibility is generally moderate, however, there are a few areas of concern. A state highway runs parallel to the river just upstream of the intake and here bridges are within close proximity of several underground storage tanks and business activities that have the potential for release of hazardous chemicals. There appears to be some instances of straight pipe sewage discharges near the intake, but the majority of the discharges are not an immediate threat. No mining activity is ongoing near the intake, however, there is substantial mining through the watershed. Please contact your water office with any concerns you may have.

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 materials, and may pick up substances resulting from the presence of animals or from human activity. Contaminants that maybe present in source water include: microbial contaminants, such as viruses and bacteria, (sewage plants, septic systems, livestock operations, or wildlife). Inorganic contaminants, such as salts and metals (naturally occurring or from stormwater runoff, wastewater discharges, oil and gas production, mining, or farming); pesticides and herbicides, (stormwater runoff, agriculture or residential uses); organic chemical contaminants, including synthetic and volatile organic chemicals, (by-products of industrial processes and petroleum production, or from gas stations, stormwater runoff, or septic systems); radioactive contaminants (naturally occurring or from oil and gas production or mining activities). In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water to provide the same protection for public health.

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 infections of Cryptosporidium and other microbial contaminant are available from the Safe Drinking Water Hotline (800-426-4791).

Some or all of these definitions may be found in this report:

Maximum Contaminant Level (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 (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) is 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) is 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.

Below Detection Levels (BDL) – laboratory analysis indicates that the contaminant is not present.

Not Applicable – does not apply.

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 $10,000.00.

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 $10,000,000.00.

Parts per trillion (ppt) – one part per trillion corresponds to one minute in 2,000,000 years, or one penny in $10,000,000,000.

Parts per quadrillion (ppq)- one part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in $10,000,000,000,000

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

Millirems per year (mrem/yr) – measure of radiation absorbed by the body.

Million Fibers per Liter (MFL) – a measure of the presence of asbestos fibers that are longer than 10.

Nephelometric Turbidity Unit (NTU) – a measure of the clarity of water. Turbidity has no health effects. However, turbidity can provide a medium for microbial growth. Turbidity is monitored because it is a good indicator of the effectiveness of the filtration process.

Variances & Exceptions (V&E) – State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

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

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

INFORMATION ABOUT LEAD

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. Your local public 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, 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

Spanish (Español) Este informe contiene inforación muy importante sobre la calidad de su agua beber. Tradúzcalo o hable con alguien que lo entienda bien.

The data presented in this report are from the most recent testing done in accordance with administrative regulations in 401 KAR Chapter 8. As authorized and approved by EPA, the State has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data in this table, though representative, may be more than one year old.

Turbidity	Allowable Levels	Highest Single Result	Lowest Monthly Percent	Date of Sample	Violation	Likely Source of Contamination
(NTU) TT * Representative samples of filtered water	No more than 1 NTU* Less than 0.3 NTU in 95% of monthly samples	0.09	100	2015	No	Naturally present in the environment

Lead and Copper [code] (units)	Action Level (AL)	MCLG	90th Percentile	Sites Exceeding Action Level	Date of Sample	Violation	Likely Source of Contamination
Copper [1022] (ppm)	1.3	1.3	0.15 (90th Percentile)	0.01 to 0.17	Jul -14	No	Corrosion of household plumbing systems
Lead [1030] (ppb)	15	0	3 (90th Percentile)	2 to 3	Jul-14	No	Corrosion of household plumbing systems

Regulated Contaminant [code] (units)	MCL	MCLG	Report Level	Range of Detection	Date of Sample	Violation	Likely Source of Contamination
Total Coliform Bacteria # or % positive samples	TT	N/A	0	N/A	NA	No	Naturally present in the environment
E.coli Bacteria % positive samples	0%	0	0	N/A	NA	No	Human and animal fecal waste
Beta photon emitters (pCi/L)	50	0	5.60	0 to 5.6	Jun-10	No	Decay of natural and man-made deposits
Alpha emitters [4000] (pCi/L)	15	0	0.18	0.0 to 0.18	Jun-10	No	Erosion of natural deposits
Combined radium (pCi/L)	5	0	0.20	0 to 0.2	Jun-10	No	Erosion of natural deposits
Uranium (µg/L)	30	0	0.35	0 to 0.35	Jun-10	No	Erosion of natural deposits
Barium [1010] (ppm)	2	2	0.030	0.030 to o.030	Feb-15	No	Drilling wastes; metal refineries; erosion of natural deposits
Fluoride [1025] (ppm)	4	4	0.9	0.9 to 0.9	Feb-15	No	Water additive which promotes strong teeth; erosion of natural deposits
Nitrate [1040] (ppm)	10	10	0.22	0.22 to 0.22	Feb-15	No	Fertilizer runoff; leaching from septic tanks, sewage; erosion of natural deposits
Total Organic Carbon (ppm) (measured as ppm, but reported as a ratio)	TT*	N/A	1.0 (lowest average)	1.0 to 1.0 (monthly ratios)	2015	No	Naturally present in environment.
*Monthly ratio is the % TOC removal achieved to the % TOC removal required. Annual average must be 1.00 or greater for compliance.							
Chlorine (ppm)	MRDL = 4	MRDLG = 4	1.49 (highest average)	0.43 to 2.25	2015	No	Water additive used to control microbes.
HAA (ppb) (Stage 2) [Haloacetic acids]	60	N/A	35 (high site average)	5 to 77 (range of individual sites)	2015	No	Byproduct of drinking water disinfection
TTHM (ppb) (Stage 2) [total trihalomethanes]	80	N/A	34 (high site average)	8 to 78 (range of individual sites)	2015	No	Byproduct of drinking water disinfection

	average	range of detection
Fluoride (added for dental health)	0.89	0.5 to 1.3
Sodium (EPA guidance level = 20 mg/L)	20	20 to 20

Notice of Violation: Violation # 2016-9926532
October 2015: Failed to Submit Adequate Sampling Results to Meet Chlorine Summary Requirements for the Compliance Period of October 2015. Page 7 of Monthly Operating Report Missing.
Corrective Action: Submitted Page 7
No Health Effects