

Jackson Municipal Water & Sewer 2021 Water Quality Report

Manager: Dillard Wilder

CCR Contact: Wanda Chapman

PWSID: KY0130208

Address: 333 Broadway Jackson, KY 41339

Phone: 606-666-5272

Meetings: Jackson City Hall / Fourth Thursday each month / 5:30 pm

Jackson Municipal Water system withdraws surface water from the North Fork of the Kentucky River where it is processed at our water treatment plant. During the treatment process particulate matter suspended in the raw water is settled and oxidized to remove contaminants after which the water is filtered and disinfected with chlorine to further protect public health. As part of a multi barrier approach to safeguard the public, land uses within the watershed have been assessed to better understand their potential impact to water quality and to assign a susceptibility rating. A susceptibility analysis uses a weighted rating system which evaluates the toxicity, distance, and likelihood of release of contaminants to adversely affect water quality. The rating for the City is moderate however, there are a few areas of concern. Highways and bridges near streams are of high concern due to potential problems should a hazardous spill occur there. Run-off and erosion from logging and mining activities are other potential threats. Other potential contaminants and activities of concern are illegal dumping, fuel storage tanks and straight pipes. Activities and land use within the watershed can pose potential risks to your drinking water. Under certain circumstances, contaminants could be released that would pose challenges to water treatment or contaminate your drinking water. These activities, and how they are conducted, are of interest to the entire community because they potentially affect your health and the cost of treating your water. The complete source water assessment is presented in the Breathitt County Water Supply plan. The plan is available for review at the Kentucky River Area Development District in Hazard.

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. More information about contaminants and potential health effects may be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

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 may 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, (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 infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

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 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>.

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

Maximum Contaminant Level (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 (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.

Maximum Residual Disinfectant Level (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 (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.

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

Not Applicable (N/A) - 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.

Parts per billion (ppb) - or micrograms per liter, (µg/L). One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Parts per trillion (ppt) - one part per trillion corresponds to one minute in 2,000,000 years, or a single 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 micrometers.

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 system.

Variances & Exemptions (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.

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

To understand the possible health effects described for many regulated contaminants, 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.

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. Copies of this report are available upon request by contacting our office during business hours.

Regulated Contaminant Test Results

Contaminant [code] (units)	MCL	MCLG	Report Level	Range of Detection	Date of Sample	Violation	Likely Source of Contamination
Inorganic Contaminants							
Barium [1010] (ppm)	2	2	0.04	0.04 to 0.04	Apr-21	No	Drilling wastes; metal refineries; erosion of natural deposits
Fluoride [1025] (ppm)	4	4	0.76	0.76 to 0.76	Apr-21	No	Water additive which promotes strong teeth
Nitrate [1040] (ppm)	10	10	0.23	0.23 to 0.23	Apr-21	No	Fertilizer runoff; leaching from septic tanks, sewage; erosion of natural deposits

Disinfectants/Disinfection Byproducts and Precursors

Total Organic Carbon (ppm) (measured as ppm, but reported as a ratio)	TT*	N/A	1.18 (lowest average)	1.00 to 1.97 (monthly ratios)	2021	No	Naturally present in environment.
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*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	1.81 (highest average)	0.44 to 2.83	2021	No	Water additive used to control microbes.
HAA (ppb) (Stage 2) [Halooacetic acids]	60	N/A	33 (high site average)	6 to 58 (range of individual sites)	2021	No	Byproduct of drinking water disinfection
TTHM (ppb) (Stage 2) [total trihalomethanes]	80	N/A	73 (high site average)	20 to 122 (range of individual sites)	2021	No	Byproduct of drinking water disinfection.

Household Plumbing Contaminants

Copper [1022] (ppm) sites exceeding action level 0	AL = 1.3	1.3	0.05 (90 th percentile)	0 to 0.35	Sep-20	No	Corrosion of household plumbing systems
Lead [1030] (ppb) sites exceeding action level 0	AL = 15	0	3 (90 th percentile)	0 to 8	Sep-20	No	Corrosion of household plumbing systems

Other Constituents

Turbidity (NTU) TT * Representative samples	Allowable Levels	Highest Single Measurement	Lowest Monthly %	Violation	Likely Source of Turbidity
Turbidity is a measure of the clarity of the water and not a contaminant.	No more than 1 NTU* Less than 0.3 NTU in 95% of monthly samples	0.06	100	No	Soil runoff

Customer Information: Revised Total Coliform Rule

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms in two samples collected during the September 2021 monitoring period thus indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments. A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

During the past year we were required to conduct one Level 1 assessment(s). One Level 1 assessment(s) was completed. In addition, we were required to take one corrective actions and we completed one of these actions.

A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions. This assessment was conducted by the KY Division of Water on 1/13/22 and was required since we had two Level 1 assessments within a 12 month period.

During the past year one Level 2 assessment(s) were required to be completed for our water system. One Level 2 assessment(s) were completed. In addition, we were required to take two corrective actions and we completed two of these actions.

Consumer Confidence Report (CCR) Certification Calendar Year 2021

PWS Name: Jackson Municipal Water & Sewer PWSID#: KY0130208 Agency Interest#: 409
 Population Served: 4,704

Wholesaler data due to purchasers no later than April 1, unless a contract agreeing to later date is submitted with certification.
 Wholesaler data met the April 1 deadline. Not applicable:

Systems serving less than 500: Need only to notify customers by July 1 that the report is available upon request. Indicate how customers were notified and how the report was made available upon request.
 Copy attached Date: _____

Systems with populations greater than 500: Must use at least one Primary and one Secondary distribution method.

Primary Distribution Method(s):


Hand Delivery to all customers
 Mailed to all customers
 Published in Newspaper (full page of newspaper must be submitted)
 Newspaper may be used as the primary distribution method for systems with populations less than 10,000. A copy of how customers were notified that CCR would be mailed upon request must be submitted.
 Posted on Internet
 Website URL: www.tapwaterinfo.com/jackson.pdf
 Copy of website availability notice must be submitted (water bill, insert, etc.)
 Electronic Delivery (email notification)
 Electronic notification requires documentation of subject line, the number of emails sent and the number of bounce back emails, and a statement that indicates bounce back customers were mailed hardcopies of CCR.

Secondary Distribution Method(s):

Posted in Public Places in Community
 Delivered to Community Organizations
 Multiple Copies to Apts or Employers, etc.
 Mailed to postal patrons in service area
 Published in Newspaper
 Advertised availability in news media
 (N/A if Internet or E-delivery was primary distribution method)
 Posted on Local Website
 Website URL: _____
 (N/A if Internet or E-delivery was primary distribution method)
 Other (attach description or explanation of method)

This notice confirms that a Consumer Confidence Report was prepared and distributed according to the requirements for our system and appropriate notices of availability were given. To the best of my knowledge, the report contains information that is correct and consistent with the compliance monitoring data previously submitted to the Kentucky Division of Water. The copy of the report furnished to the Kentucky Division of Water is identical to the information provided to the customers.

Primary Distribution Date(s): _____
Secondary Distribution Date(s): _____

Printed Name: Dillard Wilder Title: Water Superintendent
 Signature:  Date: 6/30/22
 Address: 333 Broadway City, State, Zip: Jackson, KY 41339
 Phone: 606-666-5272 Email: wanda.chapman@cityofjacksonky.org

Water Quality – Consumer Confidence Report “Good Faith Effort”

System: Jackson Municipal Water & Sewer
PWSID#: KY0130208 **AI#:** 409


State and Federal regulations require that a community water system provide an annual report to its customers containing information on the quality of the water delivered by the system. The report must also include the risks from exposure to contaminants detected in the drinking water.

The water system must also make a good-faith effort to reach consumers who do not get water bills. A good-faith effort is to be tailored to the consumer who is served by the system but is not a bill-paying customer, such as a renter or worker.

Date	Name of Facility
<u>03/29/2022</u>	<u>BREATHITT COUNTY WATER DISTRICT</u>
<u>06/08/2022</u>	<u>DOUTHITT PARK</u>
<u>06/08/2022</u>	<u>KIWANIS PARK</u>
<u>06/09/2022</u>	<u>NIM HENSON GERIATRIC CENTER</u>
<u>06/09/2022</u>	<u>PRINCE HOLLOW APARTMENTS</u>
<u>06/09/2022</u>	<u>NORTHPOINT APARTMENTS</u>
<u>06/09/2022</u>	<u>KINGS RIDGE APARTMENTS</u>
<u>06/10/2022</u>	<u>BREATHITT COUNTY PUBLIC LIBRARY</u>
<u>06/29/2022</u>	<u>JACKSON MUNICIPAL WATERWORKS</u>

I, the undersigned, confirm that a copy of the Consumer Confidence Report was prepared and distributed to the above listed facilities. Information contained in the report furnished to the facilities is identical to information provided to the billed consumers.

Printed Name: Dillard Wilder

Signature: 

Date: 6/25/22