

## Fairfield Municipal Authority

# ANNUAL WATER QUALITY REPORT

PWSID #7010005

April 2023

*This report has been prepared in compliance with the Environmental Protection Agency (EPA) and the Pennsylvania Department of Environmental Protection (PA-DEP) regulations.*

**Last year your tap water met all U.S. Environmental Protection Agency (EPA) and Pennsylvania drinking water health standards. The Fairfield Municipal Authority vigilantly safeguards its water supplies and we are pleased to report that our system did not violate a maximum contaminant level or any other water quality standard in 2022.**

### Water Source

The source of our water is the watershed property owned by the Fairfield Municipal Authority, off Iron Springs Road in the Maria Furnace area. The groundwater aquifers, located in deep rock fractures of the 377 Harpers Formation aquifer, are relatively safe from outside contamination and have a very good yield.

The water supply system consists of four deep wells (Wells #4, #5, #6, #7), a treatment facility, and a 480,000 gallon treated water storage tank. Water is disinfected by sodium hypochlorite, stored in the tank, then distributed through gravity-fed transmission lines. Daily testing by our personnel ensures that our water meets criteria for safe disinfection levels.

### Source Water Assessment

In 2007, a Source Water Assessment of the wells and watershed area was completed by the PA Department of Environmental Protection (PADEP). The Assessment found that the wells have a moderately-high susceptibility to agricultural activity. Copies of the Assessment summaries are available for review at the office during regular operating hours, and are available on the PADEP website at [www.dep.pa.gov](http://www.dep.pa.gov) (Keyword: "DEP source water"). Complete reports were distributed to municipalities, water suppliers, local planning agencies and PADEP offices. Copies are available for review at the PADEP South-central Regional Office.

### General Educational Information

*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 **before** it is treated include:

- *Microbial contaminants*, such as viruses and bacteria, may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- *Inorganic contaminants*, such as salts and metals, can be naturally-occurring or result from urban storm-water runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, or farming.
- *Pesticides and herbicides* may come from a variety of sources such as agriculture, urban storm-water runoff, and residential uses.
- *Organic chemical contaminants*, including synthetic and volatile organic chemicals, that are by-products of industrial processes and petroleum production can also come from gas stations, urban storm-water runoff and septic systems.
- *Radioactive contaminants* can be naturally occurring or the result of oil, production and mining activities.

All public drinking water and 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 can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hot-line at 800-426-4791.

In order to ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Your municipal water is treated according to these. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must 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 who are undergoing chemo-therapy, people who have undergone organ transplants, those with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. They should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control (CDC) guidelines on ways to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Water Drinking Hot-line (800-426-4791).***

**Monitoring Your Water:**

We routinely monitor for contaminants in your drinking water according to federal and state laws. The tables on the following page show the results of our monitoring for the period January 1 to December 31, 2022. The State requires us to monitor for certain contaminants less than once annually because the concentrations of these contaminants do not change significantly from year to year. Others are tested twice annually, while microbial testing is done daily, weekly and monthly. Some of the data, though representative of the water quality, is more than one year old. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk.

**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 household plumbing. Fairfield Municipal Authority is responsible for providing high quality drinking water, but cannot control the variety of materials used in household plumbing components. When your water lines have been unused 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 Hot-line or at <http://www.epa.gov/safewater/lead>.

**Safety and Security of the System**

*The water source and distribution system has met all State requirements and inspections for security measures and safety of the water sources. Personnel check the system on a frequent and regular basis.*

**The watershed area, which includes the bridge, stream ford and old reservoir, is Private Property, and as such, is posted to prohibit trespassers. Anyone found in violation WILL BE PROSECUTED !**

**Office Hours:**

Monday, Wednesday & Thursday 9 am - 1 pm, or by appointment.

**Fairfield Municipal Authority**  
108 West Main Street, P. O. Box 705  
Fairfield, PA 17320

**Office Phone:** 717-642-6557  
**Treatment Plant:** 717-642-8317

**Municipal Authority Board Members**

- Randall L. Alexander, Chairman
- Francis L. Cool, Vice-Chairman
- Mark R. Keller
- Kenneth A. Kuykendall
- Patricia T. Smith

The Fairfield Municipal Authority board meets on the second Tuesday of the month at 7:00 pm in the conference room of the Village Hall, 108 West Main Street, Fairfield. Meetings are open to the public, who are welcome to share concerns and direct questions to the board. Access through the rear door of the building.

**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 life-time to have a one-in-a-million chance of having a related health effect.**

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**FOR MORE INFORMATION:**

Questions concerning information contained in this report may be directed to the office 717- 642-6557, or the water operator, Mark Keller at 717-642-8317, during regular business hours.

TTY/TDD & Voice: 711  
TTY/TDD only:1-800-654-5984

**Este informe contiene información importante acerca de su agua potable. Haga que alguien lo traduzca para usted, ó hable con alguien que lo entienda.**

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*If you wish to file a Civil Rights program complaint of discrimination, complete the USDA Program Discrimination Complaint Form, found online at [http://www.ascr.usda.gov/complaint\\_filing\\_cust.html](http://www.ascr.usda.gov/complaint_filing_cust.html), or at any USDA office, or you may call (866) 632-9992 to request the form. You may also write a letter containing all of the information requested in the form. Send your completed complaint form or letter by fax (202)690-7442, or email at [program.intake@usda.gov](mailto:program.intake@usda.gov), or by mail to: U.S. Department of Agriculture, Director, Office of Adjudication, 1400 Independence Avenue, S.W. Washington, D.C. 20250-9410.*

**\*\* The Fairfield Municipal Authority is an equal opportunity provider and employer. \*\***

# Water Quality Data Table

The tables below list only those drinking water contaminants, of all that were required to be tested, that were detected during the reporting period. Their presence does not necessarily indicate that the water poses a health risk. There were 113 tests for contaminants in 2022, in addition to daily chlorine residual testing at the distribution system entry point.

## ***Entry Point Disinfectant Residual***

Contaminant	Minimum Disinfectant Residual	Lowest Level Detected	Units	Range of Detections	Date of Lowest Value	Violation Y / N	Sources of Contamination
Chlorine (ppm)	0.40	0.51	ppm	.51 - 1.5	7/2/2022	N	Water additive used to control microbes.

## ***Chemical Contaminants***

Contaminant	MCL In CCR Units	MCLG	Average Result	Range of Detections	Sample Date	Violation Y/N	Sources of Contamination
Nitrate (ppm)	10	10	2.14 1.46 Avg 1.8	N/A	2/16/22 12/14/22	N	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
TTHM's (Total trihalomethanes) (ppb)	80	N/A	0.61	N/A	9/8/2021	N	By-product of drinking water chlorination
Chlorine (ppm) Distribution Sample	4	4		.41 - .77	monthly	N	Water additive used to control microbes.

## ***Lead and Copper Rule***

Contaminant	Action Level (AL)	MCLG	90th Percentile Value	# of Sites Above AL of Total Sites	Sample Dates	Violation of TT Y / N	Sources of Contamination
Lead (ppb)	15	0	0	0 out of 10	9/13/2022	N	Corrosion of household plumbing; Erosion of natural deposits
Copper (ppm)	1.3	1.3	0.659	0 out of 10	9/13/2022	N	Corrosion of household plumbing; Erosion of natural deposits; Leaching from wood preservatives

### ***Definitions and Abbreviations:***

- 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. MCLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.
  - Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
  - Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.
- n/a: not applicable \* nd: not detectable at testing limit \* ppm: parts per million or milligrams per liter \* ppb: parts per billion or micrograms per liter \* ppt: parts per trillion or nanograms per liter \* ppq: parts per quadrillion or picograms per liter \* pCi/L: picocuries per liter (a measure of radiation) \* Mrem/year: millirems per year (a measure of radiation absorbed by the body).