Report by:
Worthington Fire District
1400 Berlin Turnpike – Berlin, CT 06037

Date: May 29, 2024

WORTHINGTON FIRE DISTRICT
POTABLE WATER CONFIDENCE REPORT
JANUARY 1, 2023 TO DECEMBER 31, 2023

The Worthington Fire District was established in 1920 by Special Act of the Connecticut Legislature, with an effective date at which to begin operation of July 1, 1922. Its sole objective is the transmission and distribution of potable water to approximately 2,875 water customers with approximately 1,042 residential connections.

This bulletin has been prepared to provide Worthington Fire District's customers with the confidence that the water they drink meets and, in most cases, exceeds all State and Federal Drinking Water Requirements.

In 1967, the Worthington Fire District entered into an agreement to purchase water from the Berlin Water Control Commission. During the period covered by this report, January 1, 2023 to December 31, 2023, the Worthington Fire District provided water purchased from the Berlin Water Control Commission that included water from the Elton production wells (approximately 50%), the New Britain Water Department (approximately 43%), and the Cromwell Fire District (approximately 7%).

The Berlin Water Control Commission supply, excluding that provided by the New Britain Water Department and the Cromwell Fire District, comes from two (2) sources:

Elton Well #1B and Elton Well #2A.

A third (3rd) well, Elton Rd: Production Well #2 (installed in 1973, a well with a depth of 102 feet and a capacity of 550 gallons per minute) was replaced by Well #2A in 1996.

Elton Well #1A was installed in 1973 and rehabilitated in 1994 and 1997; Well #1 was replaced in 1998 and reclassified as Well #1A. Well #1A was replaced by Well #1B in 2017.

Elton Well #2A (with a depth of 105 feet and a production of 350 gallons per minute, as stated above) was placed in service in 1996. Well #2A was rehabilitated in 2017.

Water from Wells #1B and #2A are blended prior to entering the distribution system.

As required by the Connecticut State Department of Health, the Worthington Fire District has one Class 3 certified treatment operator, certified as Distribution System Operator and Water Treatment Plant Operator.

Monthly testing of the water supplied by the Worthington Fire District has shown that the water has met or exceeded every standard set by the State and Federal Agencies for quality and safety. The tables at the end of this report summarize the analytical results of water samples taken from various locations within the distribution system.

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Table I includes all of the Required Regulated contaminants that were detected in the Worthington Fire District System during the 2023 sampling season. Although all were below Maximum Contaminant Levels (MCLs), the following lists their significance and possible reasons:

Haloacetic Acids (HAA5s): are formed as a result of chlorine, used in the disinfection process, reacting with natural occurring organic acids. *Levels well above the MCL (Maximum Contaminant Level) may cause cancer.*

Trihalomethanes (TTHMs) are those compounds created by the chlorination of drinking water by the reaction of the chlorine or organic matter. A Maximum Contaminant Level (MCL) of 0.080 milligrams per liter (mg/L) has been established. 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 system, or may have an increased risk of getting cancer.

Turbidity is a measure of the cloudiness of water. It is monitored because it is a good indicator of water quality. High turbidity levels can also hinder the effectiveness of disinfection.

Table II includes all of the Required Regulated contaminants that were detected in the Worthington Fire District System during the 2023 sampling season. Although all were below Maximum Contaminant Levels (MCLs), the following lists their significance and possible reasons:

Chlorides are an indicator of sewage pollution if found in concentrations higher than normal for the area. Normal chloride concentrations vary with distance from bodies of salt water. Low levels of chlorides are not uncommon in ground water.

Nitrate Nitrogen can enter potable water as runoff from fertilizers or, as in most cases, from erosion of natural deposits. *High concentrations, in excess of 10 parts per million (ppm) may cause a condition know as Methemoglobinemia when given to very young infants. It can also be transmitted to infants by nursing mothers who have consumed the water.*

Sodium: Persons with high blood pressure, hypertension, congestive heart disease or persons on a low salt diet should consult their physician before consuming a drinking water source with a high sodium level. Low levels of sodium are not uncommon in groundwater sources.

Total Organic Carbon is a measure of the natural organic matter in potable water. It is used as a general measure of water quality and has no specific health concerns.

Cyanide: Excessive levels of cyanide can cause nerve and thyroid damage. It may be found in the discharges of various manufacturing operations.

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Barium: Excessive levels of Barium could cause increases in blood pressure. Barium is found naturally in the environment and may also be found in the discharge of drilling wastes and metal finishing.

Fluoride, in low levels, has been shown to help prevent tooth decay. The Center for Disease Control (CDC) has a recommended optimal level of 0.7 mg/L while the EPA's recommended upper limit for fluoride in drinking water is 2.0 mg/L. Excessive fluoride may lead to increased bone brittleness later in life. The levels found in testing conducted in 2017 (0.7 mg/L) were within the optimal level.

Manganese is a mineral found in the environment, primarily in natural deposits and is not uncommon in groundwater. Excessive levels may cause disease in infants.

The news of high lead levels in the water in Flint, Michigan illustrated the vital importance to public health of appropriate monitoring, sampling, and testing for lead and copper. Federal regulations require that homes be sampled every three years by having the homeowner collect a one-liter sample from the cold-water kitchen tap as a "first draw" (after the water has been standing motionless in household pipes for at least six hours). Samples were collected from the Worthington Fire District in 2021 and will be due again in 2024. Table II of this report summarizes the results of lead and copper testing conducted in 2021. During this round of sampling, none of the ten homes sampled were above the action levels set by the EPA. The EPA requires 90% of samples taken in a sampling period fall below the action levels, therefore, the Worthington Fire District remains in compliance with the Lead and Copper Rule.

Please note the following information concerning lead and copper in public drinking water:

Copper: Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some individuals who drink water containing copper in excess of the action level over years may suffer liver or kidney damage. People with Wilson's Disease should consult their personal health provider. During the lead and copper monitoring period conducted in 2021, there were no samples detected above the copper action level at any of the first draw samples collected by the homeowners.

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. The Worthington Fire District 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 in the residential plumbing for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to two 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://epa.gov/safewater/lead.

WORTHINGTON FIRE DISTRICT
POTABLE WATER CONFIDENCE REPORT
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Another simple way to reduce the possible exposure to lead is to regularly clean your faucet screens to remove material that may become trapped in the screen. Some of that material may be lead particles from your home's internal plumbing. Finally, do not use hot water from the tap to make infant formula or for cooking. Hot water may have higher mineral content than the cold water supplied by the Worthington Fire District.

Infants and young children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink water containing lead in excess of the action level over many years can develop kidney problems or high blood pressure. Infants and young children are typically more vulnerable to lead in drinking water than the general population. While the Worthington Fire District uses no lead pipes in its distribution system, it does not have ownership or responsibility for the materials used in your home's plumbing. If you are concerned about the plumbing materials used in your residence or the lead levels in your home, you can contact the Worthington Fire District for further information.

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 resulting from urban stormwater 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, urban stormwater runoff, and residential uses.
- *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.
- *Radioactive contaminants,* which can be naturally occurring or be the result of oil and gas production and mining activities.

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WORTHINGTON FIRE DISTRICT
POTABLE WATER CONFIDENCE REPORT
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In order to ensure that tap water is safe to drink, the Environmental Protection Agency (EPA) prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establishes limits for contaminants in bottled water that must provide the same protection for public health.

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 can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-7491).

However, 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).

Continuous monitoring is also being carried out to provide further protection for our drinkers.

Please Note: The State of Connecticut Department of Public Health has performed an assessment of our drinking water sources. The completed assessment report is available for access on the Drinking Water Division's web site address of: *www.dph.state.ct.us/BRS/Water/DWD.btm*

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POTABLE WATER CONFIDENCE REPORT
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WATER CONSERVATION:

Water is our most valuable natural resource. It is essential for life as we know it. Although we in the Northeast have been blessed with, at least until now, what appears to be an unlimited supply of pure, safe drinking water, the preservation of this valuable resource is the responsibility of all.

Following are just a few of the many steps that we can all take to prevent the waste and, perhaps loss, of this most valuable gift:

1. Detect and repair leaky faucets and toilets.
2. Install water-efficient showers and dish-and/or-clothes washers
3. Limit the time spent in showering.
4. Water lawns and gardens only when needed, and then only early (or late) in the day to prevent water loss by evaporation during the hot period of the day. Add mulch when possible to prevent evaporation.
5. Wash automobiles only when absolutely necessary.
6. Do not leave water running when shampooing or brushing one's teeth.

If we all take these steps as well as any others that you may think of, we will be able to assure ourselves and future generations of a safe, potable drinking water supply for many years to come.

The Worthington Fire District is proud to offer this report to its customers and to report that all of the State and Federal requirements for Public Water have not only met but in most cases, exceeded every standard set by the State and Federal Agencies for quality and safety.

If you have any questions concerning the Worthington Fire District and the water that it supplies, please contact Mr. Joe Pagliaruli at (860) 828-5630. Mr. Pagliaruli will be most happy to answer any questions that you may have or supply you with any additional information you may need.

WORTHINGTON FIRE DISTRICT

By:_____

NORTHEAST LABORATORIES

Date: May 29, 2024

WORTHINGTON FIRE DISTRICT

POTABLE WATER CONFIDENCE REPORT

JANUARY 1, 2023 TO DECEMBER 31, 2023

T A B L E I

REGULATED COMPONENTS

Parameters tested by Worthington Fire District	Maximum Contaminant Level (MCL)	*Maximum Contaminant Level Goal (MCLG)*	TEST RESULTS Range	Average
Coliform Bacteria	<5% Positive; no more than 1 Positive per Month	*0 per 100 mL*	**ABSENT = 0 / 100 mL**	**ABSENT = 0 / 100 mL**
Chlorine Residual	4.0 mg/L	-----	**<0.05 to 0.30 mg/L**	**0.11 mg/L**
Color	15 Color Units	*0 Color Units*	**0 to 10 units**	**0 units**
pH	6.4 to 10.0	*6.4 to 10.0*	**6.4 to 8.94**	**7.86**
Turbidity	5 NTU	*0 NTU*	**0.05 to 1.25 NTU**	**0.29 NTU**
Haloacetic Acids = HAA5s ***(Disinfection By-Products)***	0.060 mg/L	*0.060 mg/L*	**0.0012 to 0.0122 mg/L**	**0.0078 mg/L**
Total Trihalomethanes (TTHMs)	0.080 mg/L	*0.080 mg/L*	**0.0136 to 0.0774 mg/L**	**0.0523 mg/L**
Parameters tested by Suppliers	Maximum Contaminant Level (MCL)	Maximum Contaminant Level Goal (MCLG)	Range	Average
Nitrate	10 mg/L	*5 mg/L*	**0.049 mg/L**	**0.049 mg/L**
Sodium	---	*28 mg/L*	**15 mg/L**	**15 mg/L**
Barium	2 mg/L	*2 mg/L*	**0.02 mg/L**	**0.02 mg/L**
Cyanide	0.2 mg/L	*0.2 mg/L*	**0.005 mg/L**	**0.005 mg/L**
Chloride	250 mg/L	*250 mg/L*	**23 mg/L**	**23 m/L**
Fluoride	4 mg/L	*2 mg/L*	**0.75 mg/L**	**0.75 mg/L**
Manganese	0.05 mg/L	*0.05 mg/L*	**0.02 mg/L**	**0.02 mg/L**
Total Organic Carbon	---	*4 mg/L*	**1.52 mg/L**	**1.52 mg/L**

Abbreviations Used in This Chart:

- = Less Than
mg/L = milligrams per liter
µg/L = micrograms per liter
pCi/L = Picocuries per Liter

Results Certified by: Northeast Laboratories, Inc. (30 Cold Spring Rd. Rocky Hill CT 06067) -- Lab Cert.: PH-0404

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POTABLE WATER CONFIDENCE REPORT
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T A B L E I I

2021 LEAD & COPPER TEST RESULTS

MONITORING PERIOD:	3RD QUARTER = 2021
SAMPLE SOURCE:	DRINKING WATER: 10 TAP SOURCES
COLLECTION DATE:	September 10, 2021

Sample Project #	Street Address	LEAD Result (mg/L)	Rank		COPPER Result (mg/L)	Rank
2185288-01	1188 Worthington Ridge	<0.0005	1		<0.02	1
2185288-02	588 Worthington Ridge	0.0011	8		<0.02	2
2185288-03	1342 Farmington Ave.	0.0012	9		<0.02	3
2185288-04	123 Westview Terrace	<0.0005	2		<0.02	4
2185288-05	8 Peter Parley Rd.	<0.0005	3		<0.02	5
2185288-06	154 Sunset Lane	0.0167	10		<0.02	6
2185288-07	35 Woodbine Court	<0.0005	4		<0.02	7
2185288-08	24 Overhill Drive	<0.0005	5		<0.02	8
2185288-09	54 Baxter Ave.	<0.0005	6		<0.02	9
2185288-10	59 Skyview Drive	0.0052	7		<0.02	10

Summary: **Lead:** **90th Percentile = 0.009 mg/L** *(Action Level-0.015)*
Copper **90th Percentile = <0.02 mg/L** *(Action Level 1.3)*

THE 90TH PERCENTILE LEAD AND COPPER RESULTS WERE BELOW THE ACTION LEVELS.

COMMENTS: = TESTED DURING CALENDAR YEAR 2021
(= latest required multiple sites sampling period)

Results Certified by: Northeast Laboratories, Inc. (30 Cold Spring Rd. Rocky Hill CT 06067) -- Lab Cert.: PH-0404

Abbreviations Used in This Chart: < = Less Than ND = None Detected mg/L = milligrams per liter
pCi/L = Picocuries per Liter UG/L = micrograms per Liter

PUBLIC NOTIFICATION
Important Information About Your Drinking Water

MONITORING AND/OR REPORTING VIOLATION

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

Date: _____
PWSID: CT0070031
To: The Customers/Residents of Worthington Fire District
From: _____

Our public water system recently violated drinking water monitoring and/or reporting requirements. As a supplier of public drinking water, we are required to monitor the water quality of our water supply to ensure that it meets the current drinking water standards. Failure to conduct monitoring and/or report results of such monitoring to the State Department of Public Health Drinking Water Section constitutes a violation. Although this incident was not an emergency, as our customers, you have a right to know what happened and what we did to correct this situation.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. We did not complete the monitoring or did not report the results for the requirement(s) listed below:

Disinfectant Byproducts - TTHM & HAA5 (WSF ID: 00600; Monitoring Period: January 1, 2024 - March 31, 2024) TTHM & HAA5 (WSF ID: 00600; Monitoring Period: April 1, 2024 - June 30, 2024)

What is being done?

The following areas have been affected:
Quarterly Sampling for TTHM's & HAA5's were collected in the correct quarterly sampling period; They were not collected in the correct month as required by Worthington Fire District DBP Stage 2 Plan. Samples for January were collected in February and Samples for April were collected in May.

The following steps are being taken to correct this violation:
There are no health risks from this violation. The sampling laboratory has been consulted to ensure sampling is done in both the correct quarter and month.

We expect to return to compliance or resolve the situation by July 2024 (date)

If you have any questions please contact Joe Pagliarli (owner, operator or designee) at 860-828-5630 (phone #) or by mail at 1400 Berlin Turnpike (Street), Berlin (Town), CT (State), 06037 (Zip Code)

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.