

DUTCHESS COUNTY

WATER AND
ASTEWATER AUTHORITY



BIRCH HILL WATER SYSTEM

WATER QUALITY REPORT

2024

UNDERSTANDING THIS REPORT

Every year, Dutchess County Water and Wastewater Authority (DCWWA) publishes a report on the quality of Birch Hill's drinking water. This isn't just a state and federal requirement—it's also an opportunity to help our customers understand where their water comes from, what's in it, and how we work to keep it safe and reliable.

We're happy to let you know that in 2024, your drinking water met all State health and safety standards, with no violations of any water quality limits.

If you have any questions about this report or the information it contains, please don't hesitate to reach out using the contact information below. We encourage you to be part of the conversation about your water system.

WHO WE ARE

DCWWA is an independent, not-for-profit public benefit corporation that was established in 1991 by an act of the State at the request of Dutchess County. Authority actions are governed by an appointed Board of Directors.

As owner and operator of 18 drinking water systems that collectively serve over 22,000 people, DCWWA is committed to the providing reliable drinking water with quality customer service at a reasonable cost, proportionate to the cost of proper operation and environmental stewardship.

OUR MISSION

To protect and enhance the health, environmental sustainability and economic stability of Dutchess County and its residents through the provision of clean drinking water and proper treatment of wastewater.

CONTACT US

Call our office Monday-Friday, 9:00 a.m. to 4:00 p.m. at

(845) 486-3601



Email us anytime at

DCWWA@dutchessny.gov



Visit our website to sign up for system-specific Alerts and Advisories

<http://www.dcwwa.org/>



Attend one of our monthly Board Meetings virtually, or in person at our office located at

1 Lagrange Ave, Poughkeepsie, NY



CELEBRATING EXCELLENCE IN WATER MANAGEMENT

We are thrilled to announce that DCWWA Operator Cody Nelson, the Lead Operator of your water system, has been honored with the prestigious Operator of the Year award from the New York section of the American Water Works Association. This recognition highlights his exceptional expertise and commitment to maintaining the highest standards of water service for your community.



DRINKING WATER FACTS

FROM THE U.S. EPA AND THE NEW YORK STATE DEPARTMENT OF HEALTH



How water sources can contain contaminants

Drinking water (both tap water and bottled water) comes from natural sources, including rivers, lakes, streams, ponds, reservoirs, springs and wells.

As water travels over the surface of the land and through the ground, it dissolves naturally occurring minerals. Substances resulting from the presence of animal or human activity—even radioactive material—can also be picked up along the way.

Potential contaminants in New York water sources

All drinking water, including bottled water, may reasonably be expected to contain at least some small amount of contamination. This does not necessarily indicate that the water poses a health risk.

In the Hudson Valley's groundwater supplies, potential sources of contamination include:

- Microbial contaminants, such as viruses, bacteria, and protozoa
- Inorganic contaminants, including metals, salts, and radioactive materials that may occur naturally in rocks and soils or leach from manmade sources
- Organic contaminants, which often result from chlorine combining with naturally occurring organic matter



How safe water standards are set and enforced

To ensure tap water is safe to drink, the State and the EPA set regulations that limit the levels of certain contaminants in water provided by public water systems. Water providers are required to perform routine testing for regulated contaminants and report the results to the New York State Department of Health and water users. If a water system fails to meet drinking water standards or violates regulations, penalties can be imposed. These penalties might include fines, mandatory corrective actions, or, in extreme cases, legal action to shut down or restrict a water system. If something is wrong with your water, you will be notified.

More information about contaminants and their potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at 1 (800) 426-4791 or the Dutchess County Department of Health at (845) 486-3404.



**Department
of Health**

Important Information from the New York State Department of Health

The NYS DOH has completed a source water assessment for this system, based on available information. Possible and actual threats to this water source were evaluated. The State source water assessments include a susceptibility rating based on the risk posed by each potential source of contamination and how easily contaminants can move through the subsurface to the wells. Susceptibility rating is an estimate of the potential for contamination of the source water, it does not mean that the water delivered to consumers is or will be contaminated. See section "Are there contaminants in our drinking water?" for a list of the contaminants that have been detected, if any. The source water assessments provide resource managers with additional information for protecting source waters in the future. The source water assessment has rated our water source as having an elevated susceptibility to microbial and nitrate contamination. These ratings are due primarily to the proximity of the wells to a landfill and a permitted discharge facility (industrial/commercial facilities that discharge wastewater into the environment and are regulated by the state and/or federal government) and the residential and agricultural land use and related activities in the assessment area. In addition, the wells draw from fractured bedrock and overlying soils may not provide adequate protection from potential contamination. The county and state health departments will use this information to direct future source water protection activities. The source water assessment summary for your system is available by calling the Dutchess County Department of Health at (845) 486-3404 and requesting a copy.

WHERE DOES OUR

WATER COME FROM?

The Birch Hill Water System has been in service since 1991. The system has been owned by DCWWA since 2009 and has been operated by DCWWA staff since 2022.

Birch Hill's water source is groundwater drawn from three wells, which were drilled in 1998. To maintain water production, these wells are periodically redeveloped when their pumping rates decline.

Water from the wells is pumped to the treatment plant, where it goes through a multi-step process to make sure it's clean and safe. First, sodium hypochlorite is added to disinfect the water and eliminate any harmful microbes. Disinfected water passes through greensand filters, which remove naturally occurring metals that can affect the water's look, taste, and overall quality. After that, phosphoric acid is added to prevent corrosion in the pipes, which keeps harmful metals like lead and copper from leaching into the water. Finally, sodium hydroxide is used to raise the pH—this helps preserve the system's infrastructure while keeping your water crisp and refreshing.

After treatment, the water is stored in a 15,000-gallon underground tank and pumped to two 1,000-gallon hydropneumatic tanks, which help maintain consistent pressure as the water travels through the system's 9,085 feet of distribution piping.

The Birch Hill Water System serves about 182 people through 69 customer connections. While that's much smaller than the national average of around 8,000 customers per water system, it means we're able to focus on what matters most—**you**. Smaller systems like Birch Hill are all about serving neighbors, not numbers. Every household we serve is part of what makes this community special, and we're committed to delivering the same high-quality water and service you'd expect from a much larger system.



Are There Contaminants in Our Drinking Water?

As State regulations require, we routinely test your drinking water for numerous contaminants. In 2024, our staff conducted tests for 48 different contaminants. Of these, eight contaminants were present at detectable levels.

The following table presents information on the contaminants found in your drinking water, when they were detected, the concentrations found, and how those levels compare with State standards. The State allows us to test for some contaminants less than once a year because the concentrations of these contaminants tend to change slowly over time. Some of our data, though representative, are more than a year old.

In 2021, samples collected from two raw well sources, Well 4A and Well C4, exceeded the State standard for color. Color has no health impacts and is effectively removed by Birch Hill's water treatment equipment, meaning finished water is expected to meet all relevant safety and aesthetic standards.

Please read on for more information on your drinking water and the contaminants it contains.

TABLE OF DETECTED CONTAMINANTS

Birch Hill Water System
Public Water System ID NY1330021

Contaminant: **TOTAL TRIHALOMETHANES (TTHM)**

Why we test for it: 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 systems, and may have an increased risk of getting cancer.

Sources in drinking water: By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains organic matter.

Sample Location	Sample Date(s)	Level Detected (Range)	Regulatory Limit (MCL/MRDL)	MCLG	Unit	Meets State Standards?
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System Wide	8/24/2022	3.90	80	N/A	ug/L	☒
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Contaminant: **ANTIMONY**

Why we test for it: Some people who drink water containing antimony well in excess of the MCL over many years could experience increases in blood cholesterol and decreases in blood sugar.

Sources in drinking water: Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder

Sample Location	Sample Date(s)	Level Detected (Range)	Regulatory Limit (MCL/MRDL)	MCLG	Unit	Meets State Standards?
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Well C4	7/30/2021	1.20	6	6	ug/L	☒
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Contaminant: **BARIUM**

Why we test for it: Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.

Sources in drinking water: Discharge from drilling wastes; Discharge from metal refineries; Erosion of natural deposits.

Sample Location	Sample Date(s)	Level Detected (Range)	Regulatory Limit (MCL/MRDL)	MCLG	Unit	Meets State Standards?
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Entry Point	4/19/2022	0.004	2	2	mg/L	☒
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Well 4A	7/26/2021	0.01	2	2	mg/L	☒
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Well 5A	2/15/2021	0.02	2	2	mg/L	☒
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Well C4	7/30/2021	0.02	2	2	mg/L	☒
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Contaminant:
CALCIUM

Why we test for it: Calcium in water may support bone and cardiovascular health, but high calcium levels can cause undesirable mineral scale in distribution piping and plumbing fixtures.

Sources in drinking water: Naturally occurring.

Sample Location	Sample Date(s)	Level Detected (Range)	Regulatory Limit (MCL/MRDL)	MCLG	Unit	Meets State Standards?
Well 4A	7/26/2021	134	N/A	N/A	mg/L	☒
Well C4	7/30/2021	200	N/A	N/A	mg/L	☒

Contaminant:
CHLORIDE

Why we test for it: Chloride is essential for maintaining good health. Research has not conclusively demonstrated that human exposure to chloride itself causes adverse health effects, although exposure to high levels of certain chloride salts has been associated with adverse health effects in humans. For example, high dietary intake of sodium chloride can be a contributing factor to high blood pressure, but this has been attributed mainly to the presence of sodium. The New York State standard for chloride is 250 milligrams per liter, and is based on chloride’s effects on the taste and odor of the water.

Sources in drinking water: Naturally occurring or indicative of road salt contamination.

Sample Location	Sample Date(s)	Level Detected (Range)	Regulatory Limit (MCL/MRDL)	MCLG	Unit	Meets State Standards?
Entry Point	4/19/2023	52.73	250	N/A	mg/L	☒
Well 4A	7/26/2021	29.50	250	N/A	mg/L	☒
Well 5A	2/15/2021	31.90	250	N/A	mg/L	☒
Well C4	7/30/2021	65.60	250	N/A	mg/L	☒

Contaminant: **COPPER¹**

Why we test for it: 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 people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

Sources in drinking water: Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives.

Sample Location	Sample Date(s)	Level Detected (Range)	Regulatory Limit (MCL/MRDL)	MCLG	Unit	Meets State Standards?
System Wide	8/8/2024 through 9/10/2024	0.40 0.147 - 0.499	Action Level = 1.3	1.3	mg/L	☒

Contaminant: **IRON**

Why we test for it: Iron is essential for maintaining good health. However, too much iron can cause adverse health effects. Drinking water with very large amounts of iron can cause nausea, vomiting, diarrhea, constipation and stomach pain. These effects usually diminish once the elevated iron exposure is stopped. A small number of people have a condition called hemochromatosis, in which the body absorbs and stores too much iron. People with hemochromatosis may be at greater risk for health effects resulting from too much iron in the body (sometimes called "iron overload") and should be aware of their overall iron intake. The New York State standard for iron in drinking water is 0.3 milligrams per liter, and is based on iron's effects on the taste, odor and color of the water.

Sources in drinking water: Naturally occurring.

Sample Location	Sample Date(s)	Level Detected (Range)	Regulatory Limit (MCL/MRDL)	MCLG	Unit	Meets State Standards?
Entry Point	2/21/2024 through 11/5/2024	2.50 ND - 10	300	N/A	ug/L	☒

Contaminant: **MANGANESE**

Why we test for it: Manganese is a common element in rocks, soil, water, plants, and animals. Manganese occurs naturally in water after dissolving from rocks and soil. Contamination of drinking water may occur if manganese gets into surface or groundwater after dissolving from rocks and soil. It may also occur if manganese gets into surface or groundwater after improper waste disposal in landfills or by facilities using manganese in the production of steel or other products. Manganese is an essential nutrient that is necessary to maintain good health. However, exposure to too much manganese can cause adverse health effects. There is some evidence from human studies that long-term exposure to manganese in drinking water is associated with nervous system effects in adults (e.g., weakness, stiff muscles and trembling of the hands) and children (learning and behavior). The results of these studies only suggest an effect because the possible influences of other factors were not adequately assessed. There is supporting evidence that manganese causes nervous system effects in humans from occupational studies of workers exposed to high levels of manganese in air, but the relevance of these studies to long term drinking water exposure is less clear because the exposures were quite elevated and by inhalation, not by ingestion.

Sources in drinking water: Naturally occurring; Indicative of landfill contamination.

Sample Location	Sample Date(s)	Level Detected (Range)	Regulatory Limit (MCL/MRDL)	MCLG	Unit	Meets State Standards?
Entry Point	2/21/2024 through 11/5/2024	0.38 ND - 1.53	300	N/A	ug/L	☒

Contaminant: **NICKEL**

Why we test for it: Contact with high concentrations of nickel has the potential cause a variety of side effects on human health, such as allergy, cardiovascular and kidney diseases, lung fibrosis, lung and nasal cancer.

Sources in drinking water: Naturally occurring, byproduct of some manufacturing waste.

Sample Location	Sample Date(s)	Level Detected (Range)	Regulatory Limit (MCL/MRDL)	MCLG	Unit	Meets State Standards?
Entry Point	4/19/2022	0.01	N/A	N/A	ug/L	☑
Well 4A	7/26/2021	0.02	N/A	N/A	ug/L	☑
Well 5A	2/15/2021	0.09	N/A	N/A	ug/L	☑
Well C4	7/30/2021	0.04	N/A	N/A	ug/L	☑

Contaminant: **NITRATE (AS N)**

Why we test for it: Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.

Sources in drinking water: Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Sample Location	Sample Date(s)	Level Detected (Range)	Regulatory Limit (MCL/MRDL)	MCLG	Unit	Meets State Standards?
Entry Point	4/12/2023	0.32	10	10	mg/L	☑
Well 5A	2/15/2021	0.26	10	10	mg/L	☑

Contaminant: **PHOSPHATE**

Why we test for it: This chemical is added at the treatment plant to reduce corrosion in distribution system piping. Some studies suggest that consuming extremely high levels of phosphates may increase the risk of cardiovascular disease.

Sources in drinking water: Treatment chemical added for corrosion control.

Sample Location	Sample Date(s)	Level Detected (Range)	Regulatory Limit (MCL/MRDL)	MCLG	Unit	Meets State Standards?
System Wide	1/18/2024 through 12/4/2024	0.81 0.239 - 1.74	N/A	N/A	mg/L	☑

Contaminant: **SODIUM**

Why we test for it: Water containing more than 20 mg/l of sodium should not be used for drinking by people on severely restricted sodium diets. Water containing more than 270 mg/l of sodium should not be used for drinking by people on moderately restricted sodium diets.

Sources in drinking water: Naturally occurring; Road salt; Water softeners; Animal waste.

Sample Location	Sample Date(s)	Level Detected (Range)	Regulatory Limit (MCL/MRDL)	MCLG	Unit	Meets State Standards?
Entry Point	4/19/2023	33.7	(See Above)	N/A	mg/L	☑
Well 4A	7/26/2021	16.6	(See Above)	N/A	mg/L	☑
Well 5A	2/15/2021	20.9	(See Above)	N/A	mg/L	☑
Well C4	7/30/2021	38.8	(See Above)	N/A	mg/L	☑

Contaminant: **SULFATE**

Why we test for it: Drinking water containing high concentrations of sulfate can cause short-term intestinal effects in humans. The effects can range from a laxative effect (loose stools) to diarrhea (unusually frequent and liquid bowel movements). Diarrhea is of particular concern in infants, because it can lead to more serious effects such as dehydration. Travelers or new residents, who may change from drinking water with low sulfate concentrations to drinking water with high sulfate concentrations, may experience short term intestinal effects due to sulfate. The New York State standard for sulfate is 250 milligrams per liter, and is based on sulfate's effects on the taste and odor of the water.

Sources in drinking water: Naturally occurring.

Sample Location	Sample Date(s)	Level Detected (Range)	Regulatory Limit (MCL/MRDL)	MCLG	Unit	Meets State Standards?
Entry Point	4/19/2023	51.6	250	N/A	mg/L	☑
Well 4A	7/26/2021	39.1	250	N/A	mg/L	☑
Well 5A	2/15/2021	62.1	250	N/A	mg/L	☑
Well C4	7/30/2021	45.7	250	N/A	mg/L	☑

Contaminant: **ZINC**

Why we test for it: Zinc has no health effects unless detected in very high concentrations. The presence of zinc may result in an undesirable taste in drinking water.

Sources in drinking water: Naturally occurring; Mining waste.

Sample Location	Sample Date(s)	Level Detected (Range)	Regulatory Limit (MCL/MRDL)	MCLG	Unit	Meets State Standards?
Well 4A	7/26/2021	3.07	5	N/A	mg/L	☑
Well 5A	2/15/2021	2.32	5	N/A	mg/L	☑
Well C4	7/30/2021	0.15	5	N/A	mg/L	☑

Contaminant: **TOTAL COLIFORM²**

Why we test for it: 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 indicating the need to look for potential problems in water treatment or distribution.

Sources in drinking water: Naturally present in the environment.

Sample Location	Sample Date(s)	Level Detected (Range)	Regulatory Limit (MCL/MRDL)	MCLG	Unit	Meets State Standards?
System Wide	1/18/2024 through 12/4/2024	1 positive sample	TT = 2 or more positive samples after April 1, 2016	0	N/A	☑
Well 4A	7/26/2021	1 positive sample	TT = 2 or more positive samples after April 1, 2016	0	N/A	☑
Well C4	7/30/2021	1 positive sample	TT = 2 or more positive samples after April 1, 2016	0	N/A	☑
Well C4	8/4/2021	1 positive sample	TT = 2 or more positive samples after April 1, 2016	0	N/A	☑

Contaminant: **ALKALINITY TO pH 4.5 AS MG/L CaCO₃**

Why we test for it: Alkalinity, a measure of water's capacity to neutralize acids, can influence water treatment processes.

Sources in drinking water: Naturally occurring.

Sample Location	Sample Date(s)	Level Detected (Range)	Regulatory Limit (MCL/MRDL)	MCLG	Unit	Meets State Standards?
Well 4A	7/26/2021	159	N/A	N/A	mg/L	☒
Well C4	7/30/2021	186	N/A	N/A	mg/L	☒

Contaminant: **COLOR**

Why we test for it: Color has no health effects. In some instances, color may be objectionable to some people at as low as 5 units. Its presence is aesthetically objectionable and suggests that the water may need additional treatment.

Sources in drinking water: Large quantities of organic chemicals, inadequate treatment, high disinfectant demand and the potential for production of excess amounts of disinfectant by products such as trihalomethanes, the presence of metals such as copper, iron and manganese; Natural color may be caused by decaying leaves, plants, and soil organic matter.

Sample Location	Sample Date(s)	Level Detected (Range)	Regulatory Limit (MCL/MRDL)	MCLG	Unit	Meets State Standards?
Well 4A	7/26/2021	20	15	N/A	Units	☐
Well 5A	2/15/2021	5	15	N/A	Units	☒
Well C4	7/30/2021	20	15	N/A	Units	☐

Contaminant: **ODOR**

Why we test for it: Odor as measured by this standard procedure has no health effects; although several contaminants exert odors when they are present at levels near their MCLs. Odor is an important quality factor affecting the drinkability of water.

Sources in drinking water: Organic or inorganic pollutants originating from municipal and industrial waste discharges; natural sources.

Sample Location	Sample Date(s)	Level Detected (Range)	Regulatory Limit (MCL/MRDL)	MCLG	Unit	Meets State Standards?
Entry Point	4/19/2023	2.67	3	N/A	Units	☒
Well 4A	7/26/2021	1	3	N/A	Units	☒

Well 5A	2/15/2021	1	3	N/A	Units	☒
Well C4	7/30/2021	3	3	N/A	Units	☒

Contaminant:
TOTAL DISSOLVED SOLIDS

Why we test for it: A high concentration of dissolved solids does not pose a health hazard, but it can provide an indicator of the presence of other potentially harmful contaminants.

Sources in drinking water: Erosion of natural deposits.

Sample Location	Sample Date(s)	Level Detected (Range)	Regulatory Limit (MCL/MRDL)	MCLG	Unit	Meets State Standards?
Well 4A	7/26/2021	232	N/A	1,200	mg/L	☒
Well C4	7/30/2021	444	N/A	1,200	mg/L	☒

Contaminant:
TURBIDITY - RAW WELL

Why we test for it: Turbidity has no health effects. However, 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. Please pay special attention to the additional statement in this document regarding Cryptosporidium.

Sources in drinking water: Soil runoff.

Sample Location	Sample Date(s)	Level Detected (Range)	Regulatory Limit (MCL/MRDL)	MCLG	Unit	Meets State Standards?
Well 4A	7/26/2021	6.96	N/A	N/A	NTU	☒
Well 5A	3/16/2021	1.44	N/A	N/A	NTU	☒
Well C4	7/30/2021	0.55	N/A	N/A	NTU	☒

Contaminant: **URANIUM**

Why we test for it: Some people who drink water containing uranium in excess of the MCL over many years may have an increased risk of getting cancer.

Sources in drinking water: Erosion of natural deposits.

Sample Location	Sample Date(s)	Level Detected (Range)	Regulatory Limit (MCL/MRDL)	MCLG	Unit	Meets State Standards?
Entry Point	4/19/2022	1.67	30	0	ug/L	☒

Contaminant: **PERFLUORO-OCTANOIC ACID (PFOA)**

Why we test for it: PFOA caused a range of health effects when studied in animals at high exposure levels. The most consistent findings were effects on the liver and immune system and impaired fetal growth and development. Studies of high-level exposures to PFOA in people provide evidence that some of the health effects seen in animals may also occur in humans. The United States Environmental Protection Agency considers PFOA as having suggestive evidence for causing cancer based on studies of lifetime exposure to high levels of PFOA in animals.

Sources in drinking water: Released into the environment from widespread use in commercial and industrial applications.

Sample Location	Sample Date(s)	Level Detected (Range)	Regulatory Limit (MCL/MRDL)	MCLG	Unit	Meets State Standards?
Well 5A	8/14/2024	0.69	10	N/A	ng/L	☒
Well C4	8/14/2024	0.93	10	N/A	ng/L	☒

Contaminant: **PERFLUORO-BUTANESULFONIC ACID (PFBS)**

Why we test for it: Research is ongoing to understand the potential health effects of unregulated perfluoroalkyl compounds.

Sources in drinking water: Released into the environment from widespread use in commercial and industrial applications.

Sample Location	Sample Date(s)	Level Detected (Range)	Regulatory Limit (MCL/MRDL)	MCLG	Unit	Meets State Standards?
Well 4A	8/14/2024	0.77	N/A	2000	ng/L	☒
Well 5A	8/14/2024	0.59	N/A	2000	ng/L	☒
Well C4	8/14/2024	2.43	N/A	2000	ng/L	☒

Contaminant: **PERFLUORO-HEXANOIC ACID (PFHXA)**

Why we test for it: Research is ongoing to understand the potential health effects of unregulated perfluoroalkyl compounds.

Sources in drinking water: Released into the environment from widespread use in commercial and industrial applications.

Sample Location	Sample Date(s)	Level Detected (Range)	Regulatory Limit (MCL/MRDL)	MCLG	Unit	Meets State Standards?
Well 4A	8/14/2024	1.03	N/A	N/A	ng/L	☒
Well 5A	8/14/2024	1.15	N/A	N/A	ng/L	☒
Well C4	8/14/2024	2.08	N/A	N/A	ng/L	☒

1. The level presented is the 90th percentile of the five sites tested. A percentile is a value on a scale of 100 that indicates the percent of measurements that are equal to or below it. This means in our system lead levels in four sites were below the 90th percentile value and one site was above the 90th percentile. The action level for copper was not exceeded at any of the sites tested.
2. The U.S. EPA's Revised Total Coliform Rule requires that operators test water from different locations throughout the distribution system for this broad group of bacteria every month. DCWWA's State-certified water testing laboratory notifies operators of bacterial sample results within 24 hours. When operators received a positive total coliform result from the sample collected on October 3, 2024, they immediately collected repeat samples at the original testing location, as well as two neighboring properties. No *E. coli* was detected in any sample and all follow-up samples were free of bacteria, indicating that the issue was isolated or temporary, and there was no immediate risk to water quality. Positive bacterial samples collected from raw well water are not considered hazardous. Raw water is the untreated source water, before it undergoes any disinfection process. While bacteria may be present in raw water, this water is disinfected before it is distributed to ensure that it is safe for consumption.

DEFINITIONS

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.

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.

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.

Non-Detects (ND)

Laboratory analysis indicates that the constituent is not present.

Milligrams per liter (mg/L)

One part of liquid in one million parts of liquid (parts per million - ppm).

Micrograms per liter (ug/L)

One part of liquid in one billion parts of liquid (parts per billion - ppb).

Nanograms per liter (ng/L)

One part of liquid to one trillion parts of liquid (parts per trillion - ppt).

Picocuries per liter (pCi/L)

A measure of the radioactivity in water.

Millirems per year (mrem/yr)

A measure of radiation absorbed by the body.

One milligram per liter equals about one drop of water in a 10-gallon fish tank.



1 ppm



1 ppb

One microgram per liter equals about one drop of water in a 13,000-gallon swimming pool.

WHAT DOES THIS

INFORMATION MEAN?

Through regular testing, we've learned that some contaminants are present in your water—as is common with most water systems. The good news is that every substance detected was well below the maximum contaminant levels (MCLs) set by the State. These MCLs are strict safety standards designed to protect public health, and our results show that your water continues to exceed those rigorous standards. We share this information to keep you informed and confident in the quality of your drinking water. As always, our team remains committed to providing water that's not just safe—but also clean, clear, and reliable.

Do I need to take special precautions?

Although the drinking water provided to the Birch Hill community met or exceeded all health-based State and Federal standards, some people may be more vulnerable to disease causing microorganisms or pathogens 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 from their health care provider about their drinking water.

EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium*, *Giardia* and other microbial pathogens are available from the Safe Drinking Water Hotline (800-426-4791).

IS OUR WATER SYSTEM COMPLYING WITH OTHER RULES THAT GOVERN OPERATIONS?

Yes! During 2024, our system complied with applicable State drinking water operating, monitoring and reporting requirements.





CONCERNED ABOUT LEAD IN YOUR DRINKING WATER?

Sources of LEAD in Drinking Water



Reduce Your Exposure To Lead



To find out for certain if you have lead in drinking water, **have your water tested.**

Replace Your Lead Service Line



Identify Other Lead Sources In Your Home

Lead in homes can also come from sources other than water. If you live in a home built before 1978, you may want to have your paint tested for lead. Consider contacting your doctor to have your children tested if you are concerned about lead exposure.



For more information, visit: [epa.gov/safewater](https://www.epa.gov/safewater)

Although **testing has never revealed hazardous levels of lead in your drinking water**, we are required to present the following

Important Information on Lead Contamination

from the United States Environmental Protection Agency

Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and in home plumbing. DCWWA is responsible for providing high quality drinking water and removing lead pipes, but we cannot control the variety of materials used in the plumbing in your home. Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter, certified by an American National Standards Institute accredited certifier to reduce lead, is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure the filter is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling water does not remove lead from water. Before using tap water for drinking, cooking, or making baby formula, flush your pipes for several minutes. You can do this by running your tap, taking a shower, doing laundry or a load of dishes. If you have a lead service line or galvanized requiring replacement service line, you may need to flush your pipes for a longer period. If you are concerned about lead in your water and wish to have your water tested, contact our office. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <https://www.epa.gov/safewater/lead>.

SCAN AND SEARCH

to quickly identify your service line material



INFORMATION ON LEAD SERVICE LINE INVENTORY

A Lead Service Line (LSL) is defined as any portion of pipe that is made of lead which connects the water main to the building inlet. An LSL may be owned by the water system, owned by the property owner, or both. The inventory includes both potable and non-potable SLs within a system. In accordance with the federal Lead and Copper Rule Revisions (LCRR) DCWWA has prepared a lead service line inventory, which you can access by contacting our office to request a copy or by clicking or scanning the QR code above to search for your address on the New York State DOH's LSLI interactive map.

We are partners in

WATER CONSERVATION



Saving Water Saves Money

Using less water reduces the cost of treatment chemicals and electricity used in pumping water to your home. It also reduces strain on equipment, which means we need to replace wells, pumps, storage tanks, and other vital system components less often.



Saving Water Keeps Your System Sustainable

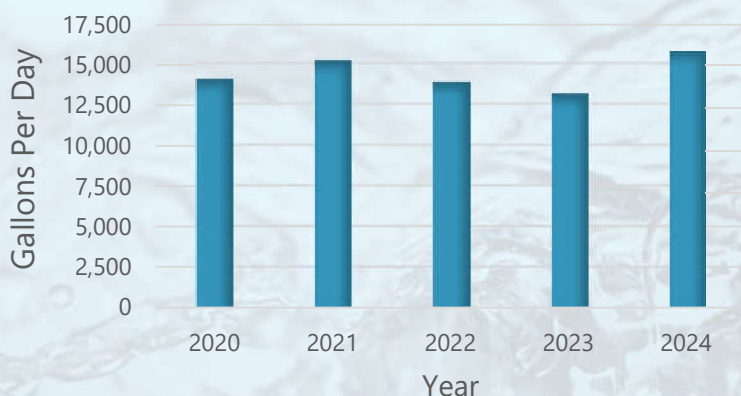
Using less water reduces stress on the aquifer your well draws from, keeping your community prepared for drought conditions and reducing the impact of future shifts in aquifer recharge patterns due to climate change.



Saving Water May Help Improve Water Quality

As the volume of water in the aquifer decreases, certain contaminants may become more concentrated in groundwater, causing users to experience unpleasant taste, color, and odor more often.

Birch Hill's Average Daily Water Use



Every Drop Counts

Since 2020, water use in the Birch Hill system has increased by approximately 12.5%, which adds up to nearly 650,000 gallons each year! Even small increases in household usage can make a big impact over time. If you have a home water softener or filtration system, we recommend checking its performance—these systems can use more water than usual when they need maintenance or adjustments.

Don't have a softener? No problem! Keep reading for simple, effective ways to conserve water at home and help reduce overall demand.

Simple Tips for Everyday Water Conservation



Don't let leaks drain your wallet. Even a small drip can waste 15 to 20 gallons a day, adding up to over 6,000 gallons a year! Take a few minutes to check faucets, toilets, and pipes—and fix any leaks as soon as you spot them.



Toilet leaks can be sneaky! To check for one, add a few drops of food coloring to the toilet tank and wait 10 to 15 minutes. If color appears in the bowl without flushing, you've got a leak. It's an easy test that could save 30,000 gallons a year.



Water lawns and gardens early in the morning or late in the evening to reduce evaporation. Make the most of every drop by switching to drip irrigation for targeted watering and adding a thick layer of mulch around plants to lock in moisture.

IN CLOSING

A Message from DCWWA's Executive Director

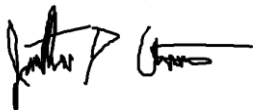
On behalf of the entire team at the Dutchess County Water and Wastewater Authority, I want to thank you for taking the time to review this Annual Water Quality Report. Our dedicated operations staff takes pride in the accurate and timely collection of thousands of water samples each year. The information in this report represents countless hours spent collecting, analyzing, and managing sample data. Presenting you with this annual synopsis of your water quality is a key part of our commitment to transparency, and we sincerely hope you find this report informative.

As the new Executive Director, a role I took on in October of 2024, I am honored to lead such a committed team of water professionals. I remain deeply focused on ensuring that our services meet the evolving needs of the people and communities we serve. As we face rising operational costs, we remain committed to controlling price increases and keeping rates as affordable as possible without compromising the quality of service you rely on.

I encourage you to reach out to our knowledgeable staff with any questions or concerns you may have about the water we provide. Your trust is important to us, and we are here to ensure that you have the data and confidence you need to make informed decisions for your family.

Thank you for your continued support. We look forward to serving you for years to come.

Sincerely,



Jonathan Churins

Executive Director
Dutchess County Water and Wastewater Authority