

Marshall Hill Elementary School (PWSID: NJ1615329)

201 Marshall Hill Road, West Milford NJ 07480

Annual Water Quality Report – Year 2024

What's The Quality of Your Water?

West Milford Board of Education is proud to supply you with this year's Water Quality Report required by the State of New Jersey Department of Environmental Protection (NJDEP) and the U.S. Environmental Protection Agency (EPA). The tables in this report show the results of our water quality analysis in the year 2024. Every regulated contaminant detected in the water, even in the minutest traces, is listed. The table contains the name of each highest level allowed by regulation (MCL), the ideal goals for public health (MCLG), usual sources of such contamination, definitions that explain what was tested, and a key to the units of measurement. *The data tables in this report show only the substances **detected** in your water; other substances may have been tested and not detected.*

The EPA requires monitoring for over 80 drinking water contaminants. The contaminants listed in the table on the next page reflect only the contaminants detected in your water for the monitoring period January 1 to December 31, 2024. We routinely monitor contaminants in your drinking water according to federal and state laws. The state allows us to monitor some contaminants less than once per year because the concentration of those contaminants does not change frequently.

Sources of Supply

Marshall Hill Elementary School takes its water from a ground water well located near the school. The water source is not treated. The well serves approximately 415 people per day.

Source Water Assessment

The New Jersey Department of Environmental Protection (NJDEP) has completed and issued the Source Water Protection Report and Summary for this public water system, which is available at <https://www.nj.gov/dep/watersupply/swap/index.html>, or by contacting the NJDEP, Bureau of Safe Drinking Water at 609-292-5550 or watersupply@dep.nj.gov.

The table below illustrates the susceptibility rating for each individual source for each of the contaminant categories at this water system. For susceptibility ratings of purchased water, refer to the specific water system's source water assessment report. NJDEP considered all surface water highly susceptible to pathogens. For the purpose of the Source Water Assessment Program, radionuclides are more of a concern for ground water than surface water. If the system is rated highly susceptible for a contaminant category, it does not mean that a customer is or will be consuming contaminated drinking water. The rating reflects the potential for contamination of source water, not the existence of contamination.

Public water systems are required to monitor regulated contaminants and to install treatment if any contaminants are detected at frequencies and concentrations above allowable levels. As a result of the assessments, NJDEP may customize (change existing) monitoring schedules based on the susceptibility ratings. If you have questions regarding the source water assessment report or summary, please contact the Bureau of Safe Drinking Water at 609-252-5550.

Source Name	Pathogens	Nutrients	Pesticide	VOCs	Inorgani	Radionuclid	Radon	DBPs
	Rating	Rating	Rating	Rating	Rating	Rating	Rating	Rating
Well 1	L	L	L	H	L	M	M	M

Susceptibility ratings for a public water system are based on the potential for a contaminant to be:

- At or above 50% of the Drinking Water Standard (MCL) = **(H) High**
- Between 10 and 50% of the Drinking Water Standard (MCL) = **(M) Medium**
- Less than 10% of the Drinking Water Standard (MCL) = **(L) Low**

Susceptibility Chart Definitions:

Pathogens: Disease-causing organisms such as bacteria and viruses. Common sources are animal and human fecal waste.

Nutrients: Compounds, minerals and elements that aid growth, and are both naturally occurring and man-made. Examples include nitrogen and phosphorus.

Volatile Organic Compounds (VOCs): Man-made chemicals used as solvents, degreasers, and gasoline components. Examples include benzene, methyl tertiary butyl ether (MTBE), and vinyl chloride.

Pesticides: Man-made chemicals used to control pests, weeds and fungus. Common sources include land application and manufacturing centers of pesticides. Examples include herbicides such as atrazine, and insecticides such as chlordane.

Inorganics: Mineral-based compounds that are both naturally occurring and man-made. Examples include arsenic, asbestos, copper, lead, and nitrates.

Radionuclides: Radioactive substances that are both naturally occurring and man-made. Examples include radium and uranium.

Radon: Colorless, odorless, cancer-causing gas that occurs naturally in the environment. For more information go to <http://www.ni.govidepirpp/radon/index.htm> or call 800-648-0394.

Disinfectant Byproduct Precursors (DBPs): A common source is naturally occurring organic matter in surface water. Disinfection byproducts are formed when other disinfectants (usually chlorine) used to kill pathogens react with dissolved organic material (for example leaves) present in surface water

WATER QUALITY TABLE

Primary Contaminants: Lead and Copper

Contaminant Monitoring Period: (01/01/24 – 06/30/24)	Compliance Achieved	Action Level (AL)	90 th Percentile	Results Range	MCLG	Samples Above Action Level	Potential Source
Lead (ppb)	Yes	15	30.2	2.09 – 98.7 – 20 Samples	0	6	Corrosion of household plumbing systems
Copper (ppm)	Yes	1.3	0.55	.0812 – 1.25 - 20 Samples	1.3	0	Corrosion of household plumbing systems
Contaminant Monitoring Period: (07/01/24 – 12/31/24)	Compliance Achieved	Action Level	90 th Percentile	Results Range	MCLG	Samples Above Action Level	Potential Source
Lead (ppb)	Yes	15	2.69	ND – 5.78 – 10 Samples	0	0	Corrosion of household plumbing systems
Copper (ppm)	Yes	1.3	0.203	0.148 – 0.238 – 10 Samples	1.3	0	Corrosion of household plumbing systems

Secondary Contaminants

Characteristics	Range Detected	Comment
pH	6.67 – 10.19	Measure of how acidic or basic a solution is. Scale ranges from 0 - 14
Alkalinity	28 – 85 mg/l	Alkalinity is a measure of water's ability to neutralize acids, acting like a buffer that helps maintain a stable pH level
Chloride	15.6 – 16.7 mg/L	A naturally occurring ion found in water, often originating from salt deposits, seawater intrusion, or road salt runoff.
Hardness Carbonate	118 – 122 mg/L	A measure of the concentration of calcium and magnesium ions in water, expressed as calcium carbonate (CaCO_3). These naturally occurring minerals are picked up as water moves through soil and rock.
Sulfate	5.75 – 6.75 mg/L	A naturally occurring compound found in soil and rock formations that can dissolve into groundwater and surface water. Sulfates may also enter drinking water through industrial discharges or the breakdown of sulfur-containing minerals.

Health Effects of Detected Contaminants:

Lead: 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. West Milford Board of Education is responsible for providing high quality drinking water and removing lead pipes, but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact West Milford Board of Education, 973-697-1700. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <http://www.epa.gov/safewater/lead>. Call us at 973-697-1700 to find out how to get your water tested for lead. Testing is essential because you cannot see, taste, or smell lead in drinking water.

Landlords must distribute this information to every tenant as soon as practicable, but no later than three business days after receipt. Delivery must be done by hand, mail, or email, and by posting the information in a prominent location at the entrance of each rental premises, pursuant to section 3 of P.L. 2021, c. 82 (C.58:12A-12.4 et seq.).

Exposure to lead in drinking water can cause serious health effects in all age groups. Infants and children can have decreases in IQ and attention span. Lead exposure can lead to new learning and behavior problems or exacerbate existing learning and behavior problems. The children of women who are exposed to lead before or during pregnancy can have increased risk of these adverse health effects. Adults can have increased risks of heart disease, high blood pressure, kidney or nervous system problems.

Copper: Copper is an essential nutrient, but some people who drink water that contains copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water that contains copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilsons Disease should consult their personal doctor.

Secondary Contaminants:

These parameters do not have an impact on health. Secondary Contaminants affect aesthetic qualities such as odor, taste or appearance. Secondary standards are recommendations, not mandates.

Alkalinity: Alkalinity is a measure of water's ability to neutralize acids, acting like a buffer that helps maintain a stable pH level

Chloride: While chloride itself is not harmful at typical levels, elevated concentrations can affect the taste of water and may contribute to corrosion in plumbing systems.

Hardness Carbonate (CaCO₃): While not a health concern, hardness can cause scale buildup in pipes and appliances and reduce the effectiveness of soaps and detergents

Sulfate: While not typically a health concern at common levels, high concentrations can cause a bitter taste and may have a laxative effect, especially in combination with magnesium

pH: Measure of how acidic or basic a solution is. Scale ranges from 0 - 14

Violations

Marshall Hill Elementary School received one violation in the year 2024. Details below.

1. 2024-3016 Lead and Copper Rule – Lead Consumer Notice (LCR) for the lead and copper results of the 01/01/2021 – 12/31/2023 monitoring period.

West Milford BOE has achieved compliance and distributed the required lead consumer notification.

Waivers:

West Milford Board of Education's, Marshall Hill Elementary School was granted an asbestos monitoring waiver for the 01/01/202 – 12/31/2028 monitoring period.

GENERAL DRINKING WATER INFORMATION:

Water Sources

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 result 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 byproducts 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.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which 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 EPA's safe Drinking Water Hotline (1-800-426-4791).

Presence of 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 EPA's Safe Drinking Water Hotline (1-800-426-4791). To ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amounts of certain contaminants in water provided by public water systems.

Immuno-Compromised Persons

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised people such as people with cancer undergoing chemotherapy, people 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 (1-800-426-4791).

Terms & Definitions:

1. Action Level (AL): The concentration of a contaminant which, if exceeded, triggers a treatment or other requirements which a water system must follow.
2. EPA - United States Environmental Protection Agency.
3. 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
4. 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.
5. Maximum Residual Disinfect Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfect is necessary for control of microbial contaminants.
6. Maximum Residual Disinfect 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 contamination.
7. N/A – Not applicable
8. NJDEP: The New Jersey Department of Environmental Protection
9. ND: Not detected
10. Picocuries per liter (pCi/L): The curie is a unit of radioactivity.
11. Part per billion (ppb): Means 1 part per 1,000,000,000 (same as micrograms per liter) and corresponds to 1 penny in \$10 million.
12. Parts per million (ppm): Parts per million. It means 1 part per 1,000,000 parts (same as milligrams per liter) and corresponds to 1 penny in \$10,000.
13. Parts per trillion (ppt): Parts per trillion. Means 1 part per 1,000,000,000,000 parts (same as nanograms per liter) and corresponds to 1 penny in \$10 billion
14. RUL: Recommended Upper Limit