

# Kingwood Township School (PWSID#: NJ1016300)

880 County Road 519, Frenchtown, NJ 08825

## Year 2021 Annual Water Quality Report

### What's The Quality of Your Water?

Kingwood Township School 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 2021. 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.*

**Kingwood Township School received no violations in 2021.** 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, 2021. We routinely monitor for contaminants in your drinking water according to federal and state laws. The state allows us to monitor for some contaminants less than once per year because the concentrations of those contaminants do not change frequently. Some of our data, though representative, may be more than one year old.

### Sources of Supply

Kingwood Township School takes its water from one ground water well located on the property of the school at 880 County Road 519 in Frenchtown, New Jersey. This well water is treated with a softener for hardness removal, and it is also treated for arsenic removal. It serves an average of 473 people per day.

### 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:

- *Biological* - may come from human, agricultural, or wildlife sources.
- *Inorganic* - can be natural, from storm run-off, or from industrial or domestic wastewater discharges.
- *Pesticides and herbicides* - may come from agricultural, storm run-off or residential use.
- *Organic chemicals* - may come from industrial or domestic processes, storm run-off, and septic systems.
- *Radioactive materials* - can be naturally occurring or the result of mining or other human activities.

#### 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). 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.

#### Immuno-Compromised Persons

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 (1-800-426-4791).

## KINGWOOD TOWNSHIP SCHOOL WATER QUALITY TABLE

| Contaminant                                | MCL Violation Y/N | Level Detected via # of Samples                                | Unit of Measurement | MCL (Highest Level Allowed) | MCLG (Goal) | Potential Source   |
|--|-------------------|--|---------------------|-----------------------------|-------------|--|
| <b>Nitrate</b><br>Test Results Year: 2021  | N                 | 2.8<br>1 Sample  | ppm                 | 10                          | 10          | Runoff from fertilizer use; leaching from septic tanks; erosion of natural deposits                    |
| <b>Lead</b><br>Test Results Year: 2019     | N                 | 3.1<br>(90 <sup>th</sup> Percentile)<br>Range: ND-3.5<br>0>AL  | ppb                 | 15<br>(Action Limit)        | 0           | Corrosion of household plumbing  |
| <b>Copper</b><br>Test Results Year: 2019   | N                 | 0.2<br>(90 <sup>th</sup> Percentile)<br>Range: 0.1-0.2<br>0>AL | ppm                 | 1.3<br>(Action Limit)       | 1.3         | Corrosion of household plumbing  |
| <b>Selenium</b><br>Test Results Year: 2019 | N                 | 2.1<br>1 Sample  | ppb                 | 50                          | 50          | Discharge from petroleum and metal refineries; erosion   |
| <b>PFNA</b><br>Test Results Year: 2021     | N                 | Highest LRAA: 7<br>Range: 6 – 9<br>4 Samples                   | ppt                 | 13                          | N/A         | Discharge from industrial chemical factories   |
| <b>PFOA</b><br>Test Results Year: 2021     | N                 | Highest LRAA: 14<br>Range: 13 – 14<br>4 Samples                | ppt                 | 14                          | N/A         | Discharge from industrial, chemical, and manufacturing factories, release of aqueous film forming foam |
| <b>PFOS</b><br>Test Results Year: 2021     | N                 | Highest LRAA: 4<br>Range: 3 – 4<br>4 Samples                   | ppt                 | 13                          | N/A         | Discharge from industrial, chemical factories, release of aqueous film forming foam                    |

### Secondary Contaminants

| Contaminant    | Average Level Detected | Range of Detections | Unit of Measurement | RUL | Potential Source    |
|----------------|------------------------|---------------------|---------------------|-----|---------------------|
| Sodium (2019)  | <b>121</b>             | 1 sample            | ppm                 | 50  | Naturally Occurring |
| Sulfate (2019) | 24.2                   | 1 sample            | ppm                 | 250 | Naturally Occurring |

### How to read this report:

| Word, Acronym, Symbol or Note | Definition   |
|-------------------------------|--|
| Y/N                           | Yes/No   |
| AL                            | Action Level. The concentration of a contaminant, which, if exceeded, triggers a treatment or other requirements, which a water system must follow.  |
| CDC                           | Centers for Disease Control  |
| EPA                           | United States Environmental Protection Agency.   |
| LRAA                          | Locational Running Annual Average  |
| MCL                           | Maximum Contaminant Level. 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. |
| MCLG                          | Maximum Contaminant Level Goal. 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.                     |

|       |   |
|-------|---|
| MRDL  | Maximum Residual Disinfectant Level – 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.                             |
| MRDLG | Maximum Residual Disinfectant Level Goal – 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. |
| N/A   | Not applicable  |
| NJDEP | New Jersey Department of Environmental Protection   |
| ND    | Not detected  |
| pCi/L | The curie is a unit of radioactivity. This is measured as Picocuries Per Liter.   |
| ppb   | Parts per billion. Means 1 part per 1,000,000,000 (same as micrograms per liter) and correspond to 1 penny in \$10 million.   |
| ppm   | Parts per million. Means 1 part per 1,000,000 parts (same as milligrams per liter) and corresponds to 1 penny in \$10,000.  |
| 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.  |
| RUL   | Recommended Upper Limit   |

### **Health Effects of Detected Contaminants:**

**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.

**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. Kingwood Township School 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 is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

**Nitrate:** Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider.

**PFNA (Perfluorononanoic Acid):** Some people who drink water containing perfluorononanoic acid in excess of the MCL over many years could experience problems with their liver, kidneys, immune system; or in males, reproductive system. For females, drinking water containing PFNA in excess of the MCL over many years may cause developmental delays in a fetus and/or an infant.

**PFOA (Perfluorooctanoic Acid):** Some people who drink water containing perfluorooctanoic acid in excess of the MCL over many years could experience problems with their blood serum cholesterol levels, liver, kidney, immune system, or, in males, reproductive system. Drinking water containing perfluorooctanoic acid in excess of the MCL over many years may also increase the risk of testicular and kidney cancer. For females, drinking water containing perfluorooctanoic acid in excess of the MCL over many years may cause developmental delays in a fetus and/or an infant.

**PFOS (Perfluorooctanesulfonic Acid):** Some people who drink water containing perfluorooctanesulfonic acid in excess of the MCL over many years could experience problems with their immune system, kidney, liver, or endocrine system. For females, drinking water containing perfluorooctanesulfonic acid in excess of the MCL over many years may cause developmental effects

and problems with the immune system, liver, or endocrine system in a fetus and/or an infant. Some of these developmental effects can persist through childhood.

**Secondary Contaminant:** 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.

**Selenium:** Selenium is an essential nutrient. However, some people who drink water containing selenium in excess of the MCL over many years could experience hair or fingernail losses, numbness in fingers or toes, or problems with their circulation.

**Sodium (Na):** For healthy individuals, the sodium intake from water is not important, because a much greater intake of sodium takes place from salt in the diet. However, sodium levels above the recommended upper limit may be of concern to individuals on a sodium restricted diet.

**Sulfate:** Sulfate occurs naturally in water and is monitored as a secondary contaminant. Secondary contaminants are aesthetic (taste and odor) rather than health risks; however, in high concentrations sulfate can cause Diarrhea in some people.

### 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 [www.nj.gov/dep/watersupply/swap/creport.htm](http://www.nj.gov/dep/watersupply/swap/creport.htm) or by contacting the NJDEP, Bureau of Safe Drinking Water at 609-292-5550.

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 for 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.

| <u>Source Name</u> | <u>Pathogens</u> | <u>Nutrients</u> | <u>Pesticides</u> | <u>VOCs</u>   | <u>Inorganics</u> | <u>Radionuclides</u> | <u>Radon</u>  | <u>DBPs</u>   |
|--------------------|------------------|------------------|-------------------|---------------|-------------------|----------------------|---------------|---------------|
|                    | <i>Rating</i>    | <i>Rating</i>    | <i>Rating</i>     | <i>Rating</i> | <i>Rating</i>     | <i>Rating</i>        | <i>Rating</i> | <i>Rating</i> |
| <b>Well 1</b>      | L                | M                | M                 | H             | H                 | H                    | H             | H             |

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**

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

**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 nitrate.

**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.nj.gov/dep/rpp/radon/index.htm> or call 800-648-0394.

**(DBPs) Disinfectant Byproduct Precursors:** 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.

*This Water Quality Report was prepared for Kingwood Township School by:*

