

# Annual Drinking Water Quality Report

Main Water System PWS ID# NJ1427005

Mt. Olive Twp. Water and Sewer Department

Report for the Year 2017, Results from the Year 2016

We are pleased to present to you this year's Annual Drinking Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water.

**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 microbiological contaminants are available from the Safe Drinking Water Hotline. (800-426-4791)**

| TEST RESULTS                           |                      |   |       |             |        |   |
|--|----------------------|---|-------|-------------|--------|---|
| Contaminant                            | Violati<br>on<br>Y/N | Highest<br>Level<br>Detected  | Units | MCL<br>G    | MCL    | Likely Source of Contamination  |
| <b>Radioactive Contaminants</b>        |                      |   |       |             |        |   |
| Alpha emitters<br>Results from 2012    | N                    | Well #1=2.94<br>Well #3=2.33  | pCi/1 | 0           | 15     | Erosion of natural deposits   |
| Combined radium                        | N                    | Well #1=3.3<br>Well #2=2.33   | pCi/1 | 0           | 5      | Erosion of natural deposits   |
| <b>Volatile Organic Contaminants</b>   |                      |   |       |             |        |   |
| Tetrachloroethylene                    |                      | Well #1=0.6<br>Well #2=0.6  | ppb   | 0           | 1      | Leaching from PVC pipes; discharge from factories and dry cleaners                          |
| <b>Inorganic Contaminants</b>          |                      |   |       |             |        |   |
| Copper<br>Results from 2015            | N                    | 90 <sup>th</sup> percentile<br>result=0.346<br>0 of 20 samples<br>exceeded the action<br>level. | ppm   | 1.3         | AL=1.3 | Corrosion of household plumbing systems; erosion of natural deposits                        |
| Lead<br>Results from 2015              | N                    | 90 <sup>th</sup> percentile<br>result=2.0<br>0 of 20 samples<br>exceeded the action<br>level.   | ppb   | 0           | AL=15  | Corrosion of household plumbing systems, erosion of natural deposits                        |
| Nitrate (as Nitrogen)                  | N                    | Well #1=3.28<br>Well #2=3.1<br>Well #3=3.07   | ppm   | 10          | 10     | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |
| Barium<br>Results from 2015            | N                    | Well #1=0.053<br>Well #2=0.054<br>Well #3=0.053   | ppm   | 2           | 2      | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits  |
| <b>Disinfection Byproducts Stage-2</b> |                      |   |       |             |        |   |
| TTHM<br>Total Trihalomethanes          | N                    | Range = 0.0-2.0<br>Highest Detection<br>=2.0  | ppb   | N/A         | 80     | By-product of drinking water disinfection   |
| <b>Regulated Disinfectants</b>         |                      | <b>Level Detected</b>   |       | <b>MRDL</b> |        | <b>MRDLG</b>  |
| Chlorine                               |                      | 0.2   |       | 4.0 ppm     |        | 4.0 ppm   |

**We are pleased to report that our drinking water is safe and meets federal and state requirements.** We want our valued customers to be informed about their water utility. If you have any questions about this report or concerning your water utility, please contact Tim Quinn at 973-691-0900 x7340 or Mike Lata at 973-584-7086. If you want to learn more, please attend any of our regularly scheduled Township Council meetings at Town Hall, 204 Flanders-Drakestown Road, Mount Olive, NJ. Meetings are held on the second and fourth Tuesdays of each month at 7:30 p.m.

Our three wells draw their water from the Leithsville Formation and are approximately 100 feet, 200 feet and 260 feet deep.

The New Jersey Department of Environmental Protection (NJDEP) has completed and issued the Source Water Assessments Reports and Summaries for this public water system, which is available at [www.state.nj.us/dep/swap](http://www.state.nj.us/dep/swap) or by contacting NJDEP's Bureau of Safe Drinking Water at (609) 292-5550. You may also contact your public water system at 973-584-7086.

The Mt. Olive Water Department routinely monitors for constituents in your drinking water according to Federal and State laws. Unless otherwise specified, the previous table shows the results of our monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2016.

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man made. These substances can be microbes, inorganic or organic chemicals and radioactive substances. All 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 the 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 at 1-800-426-4791.

The Safe Drinking Water Act regulations allow monitoring waivers to reduce or eliminate the monitoring requirements for asbestos and synthetic organic chemicals. Our system received monitoring waivers for all of these types of contaminants.

**MCL's are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink two liters of water every day at the MCL level for seventy years to have a one-in-a-million chance of having the described health effect.**

To ensure the continued quality of our water, we treat it in several ways. We decrease the iron content of the water using a polyphosphate-sequestering agent. As a precaution, we disinfect our water using a chlorination system.

**The state allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.**

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 storm water 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 storm water 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 storm water 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.

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 Mount Olive Township Water and Sewer Department 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>.

## Mount Olive Township Water Department - Main Supply- PWSID # 1427005

Mount Olive Township Water Department - Main Supply is a public community water system consisting of 3 well(s), 0 wells under the influence of surface water, 0 surface water intake(s), 0 purchased ground water source(s), and 0 purchased surface water source(s).

This system's source water comes from the following aquifer(s) and/or surface water body(s) (if applicable): Jacksonburg limestone, Kittatinny Supergroup and H

This system purchases water from the following water system(s) (if applicable):

### Susceptibility Ratings for Mount Olive Township Water Department - Main Supply Sources

The table below illustrates the susceptibility ratings for the seven contaminant categories (and radon) for each source in the system. The table provides the number of wells and intakes that rated high (H), medium (M), or low (L) for each contaminant category. For susceptibility ratings of purchased water, refer to the specific water system's source water assessment report.

The seven contaminant categories are defined at the bottom of this page. DEP considered all surface water highly susceptible to pathogens, therefore all intakes received a high rating for the pathogen category. For the purpose of Source Water Assessment Program, radionuclides are more of a concern for ground water than surface water. As a result, surface water intakes' susceptibility to radionuclides was not determined and they all received a low rating.

**If a system is rated highly susceptible for a contaminant category, it does not mean 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, DEP may customize (change existing) monitoring schedules based on the susceptibility ratings.

| Sources                   | Pathogens |   |   | Nutrients |   |   | Pesticides |   |   | Volatile Organic Compounds |   |   | Inorganics |   |   | Radionuclides |   |   | Radon |   |   | Disinfection Byproduct Precursors |   |   |
|---------------------------|-----------|---|---|-----------|---|---|------------|---|---|----------------------------|---|---|------------|---|---|---------------|---|---|-------|---|---|-----------------------------------|---|---|
|                           | H         | M | L | H         | M | L | H          | M | L | H                          | M | L | H          | M | L | H             | M | L | H     | M | L | H                                 | M | L |
| Wells - 3                 |           | 3 |   | 3         |   |   |            | 2 | 1 | 3                          |   |   |            | 1 | 2 | 2             | 1 |   | 2     | 1 |   | 2                                 | 1 |   |
| GUDI - 0                  |           |   |   |           |   |   |            |   |   |                            |   |   |            |   |   |               |   |   |       |   |   |                                   |   |   |
| Surface water intakes - 0 |           |   |   |           |   |   |            |   |   |                            |   |   |            |   |   |               |   |   |       |   |   |                                   |   |   |

- **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, that are both naturally occurring and man-made. Examples include nitrogen and phosphorus.
- **Volatile Organic Compounds:** 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.
- **Disinfection Byproduct Precursors:** A common source is naturally occurring organic matter in surface water. Disinfection byproducts are formed when the disinfectants (usually chlorine) used to kill pathogens react with dissolved organic material (for example leaves) present in surface water.

## **DEFINITIONS**

**In the previous table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we have provided the following definitions:**

**Parts per million (ppm) or Milligrams per liter (mg/l)** - one part per million corresponds to one minute in two years or a single penny in \$10,000.

**Parts per billion (ppb) or Micrograms per liter** - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

**Picocuries per liter (pCi/L)** - picocuries per liter is a measure of the radioactivity in water.

**Action Level (AL)** - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

**Maximum Contaminant Level (MCL)** - The Maximum Allowed is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

**Maximum Contaminant Level Goal (MCLG)** - The Goal is 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.

**Secondary Contaminant (SMCL)** - Substances that do not have an impact on health. Secondary Contaminants affect aesthetic qualities such as odor, taste or appearance. Secondary standards are recommendations, not mandates.

**Recommended Upper Limit (RUL)** - Recommended maximum concentration of secondary contaminants. RUL's are recommendations, not mandates.

**Maximum Residual Disinfectant Level (MRDL)**: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Maximum Residual Disinfectant Level Goal (MRDLG)**: The level of a drinking water disinfectant, below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.