**Middle Point Water Treatment Plant**

Consumer Confidence Report

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# Ohio Environmental Protection Agency Division of Drinking and Ground Waters

https://epa.ohio.gov/divisions-and-offices/drinking-and-ground-waters

**Updated March 2022**

## Section 1: Title

**Section 2: Introduction**

***Middle Point Water Treatment Plant (WTP)***

## Drinking Water Consumer Confidence Report for *2021*

 The **Middle Point WTP** has prepared the following report to provide information to you, the consumer, on the quality of our drinking water. Included within this report is general health information, water quality test results, how to participate in decisions concerning your drinking water and water system contacts. The Village of Middle Point’s drinking water met all Ohio EPA standards in 2021.

## Section 3: Source Water Information

## Our water source is ground water drawn from two wells located north of the CSX railroad tracks, between Griswold St. and Dog Creek Rd. One is 230 feet deep, and the other is 130 feet in depth. They draw our water from within fractured limestone deposits. 2015 brought major improvements to our water system. Construction of the new water treatment plant started in October 2014, and went on line May 15,2015. New variable speed pumps were installed in both wells in May and June. These are set to alternate each time the plant runs. As raw water enters the plant from the wells, it goes through 7 feet of media in the induced draft aerator to remove sulfur. Before going into the detention tank, chlorine is added by a separate pump for each well for disinfection. The detention tank consists of three chambers. Twin 7383-gallon storage chambers allow closing one for cleaning while the other provides water. The pump chamber holds 8378 gallons. From the pump chamber, twin 7.5 hp high service pumps, set to alternate, push water through the four 36" filters to remove suspended particles from the water. From the filters the water goes through twin ion exchange softeners. Finished water hardness is obtained by blending raw water in before final chlorination. Finished water leaves into the distribution system or into the 100,000-gallon tower behind the plant.

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| The Ohio EPA recently completed a study of Middle Point's source of drinking water, to identify potential contaminant sources and provide |
| guidance on protecting the drinking water source. According to this study, the aquifer (water rich zone) that supplies The Village of Middle Point, |
| has a low susceptibility to contamination. This determination is based on the following: **(a)** The presence of a relatively thick layer of permeable |
| material overlying the aquifer; **(b)** The significant depth (30 feet below ground) of the aquifer; **( c )**  That there is no evidence to suggest that |
| ground water has been impacted by any significant levels of chemical contaminants from human activities. |
|  |  |  |  |  |  |  |  |  |
| This susceptibility means that, under currently existing conditions, the likelihood of the aquifer becoming contaminated is low. This likelihood |
| can be minimized by implementing appropriate protective measures. More information about the water source assessment, or what con- |
| sumers can do to protect the aquifer, is available by calling 419-968-2005. |  |  |  |

**Section 4: What are sources of contamination to drinking water?**

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: (A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife; (B) 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; (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses; (D) 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 storm water runoff, and septic systems; (E) 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, USEPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA 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 Federal Environmental Protection Agency’s Safe Drinking Water Hotline (1-800-426-4791).

**Section 5: Who needs to take special precautions?**

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 infection. 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).

## Section 6: About your drinking water.

The EPA requires regular sampling to ensure drinking water safety. The **Middle Point WTP**

conducted sampling for ***bacteria; nitrate; synthetic organic; volatile organic; lead & copper*** during

***2021***. 221 samples were collected for more than 30different contaminants most of which were not detected in the **Middle Point WTP**water supply. The Ohio EPA requires 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 accurate, are more than one year old.

## TABLE OF DETECTED CONTAMINANTS

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Contaminants (Units)** | **MCLG** | **MCL** | **Level Found** | **Range of Detections** | **Violation** | **Sample Year** | **Typical Source of Contaminants** |
| **Nitrate** |
| Nitrate ppm | 10ppm | 10ppm | <.10 | NA | NO | 2021 | Runoff from fertilizer use/Erosion of natural deposits. |
| **TTHM/HAA5** |
| Total TrihalomethaneTTHM ug/L | NA | 80ppb |  75.5ppb | 26-115.4ppb | NO | 2021 | Disinfection by-product from chlorine use. |
| Haloacetic acidsHAA5 ug/L | NA | 60ppb | 22.73ppb | 0-32.3ppb | NO | 2021 | Disinfection by-product from chlorine use. |
| **Flouride** |
| Flouride | 4ppm | 4ppm | 1.25 | 1.25-1.25 | NO | 2019 | Erosion of natural deposits; Water additive which promotes strong teeth, Discharge from fertilizer and aluminum factories. |
| **Residual Disinfectants** |
| Total Chlorine ppm | MRDL4ppm | MRDLG4ppm | 1.23 | .49-1.68 | NO | 2021 | Water additive used for disinfection. |

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. In 2021 the Village of Middle Point did not detect any of the unregulated contaminants we tested for (iron, manganese) in our water. For a copy of the results please call the Village of Middle Point Office at 419-968-2005.

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| **Lead and Copper** |
| **Contaminant (units)** | **Action Level (AL)** |  **MCLG** | **Individual Results over the AL** | **90% of test levels were less than** | **Violation** | **Year Sampled** | **Typical source of Contaminants** |
| Lead (ppb) | 15 ppb |  0 ppb |  None | <2.0 ug/L | No | 2021 | Corrosion of old plumbing or solder from pipes. |
|  0 out of 10 samples were found to have lead levels in excess of the lead action level of 15 ppb. |
| Copper (ppm) | 1.3 ppm |  1.3 ppm | N/A | .058ppm | No | 2021 | Corrosion of old plumbing. Naturally found in environment. |
|  0 out of 10 \_ samples were found to have copper levels in excess of the copper action level of 1.3 ppm. |

## Section 13: Lead Educational Information

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. **Middle Point WTP**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, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at 800-426-4791 or at <http://www.epa.gov/safewater/lead>.

## Section 17: Revised Total Coliform Rule (RTCR) Information

*All water systems were required to begin compliance with a new rule, the Revised Total Coliform Rule, on April 1, 2016. The new rule maintains the purpose to protect public health by ensuring the integrity of the drinking water distribution system and monitoring for the presence of total coliform bacteria, which includes E. coli bacteria. The U.S. EPA anticipates greater public health protection under the new rule, as it requires water systems that are vulnerable to microbial contamination to identify and fix problems. As a result, under the new rule there is no longer a maximum contaminant level violation for multiple total coliform detections. Instead, the new rule*

 *requires water systems that exceed a specified frequency of total coliform occurrences to conduct*

*an assessment to determine if any significant deficiencies exist. If found, these must be corrected by the PWS.*

PWSs that triggered a Level 1 or Level 2 Assessment must inform their customers of:

1. The appropriate text (dependent on whether there is an E. coli MCL), listed below
2. The number of assessments required and completed.
3. The corrective actions required and completed.
4. The reasons for conducting assessments and corrective actions.
5. Whether the PWS has failed to complete any required assessments or corrective actions.
6. the specific assessment-related definitions as appropriate

No Level 1 or 2 Assessments were required in 2021

## Section 18: License to Operate (LTO) Status Information (Required)

 In ***2021*** we had an unconditioned(green) license to operate our water system.

## Section 20: Public Participation and Contact Information

**How do I participate in decisions concerning my drinking water?**

Public participation and comment are encouraged at regular meetings of ***Middle Point Council*** which meets

***on the second Tuesday of each month.*** For more information on your drinking water contact ***Josh Hoehn at 419-968-2005***

## Section 21: Definitions of some terms contained within this report.

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

### Definitions Required if term is used within the CCR.

* 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 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.
* 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.
* Contact Time (CT) means the mathematical product of a “residual disinfectant concentration” (C), which is determined before or at the first customer, and the corresponding “disinfectant contact

time” (T).

• Microcystins: Liver toxins produced by a number of cyanobacteria. Total microcystins are the sum of all the variants/congeners (forms) of the cyanotoxin microcystin.

• Cyanobacteria: Photosynthesizing bacteria, also called blue-green algae, which naturally occur in marine and freshwater ecosystems, and may produce cyanotoxins, which at sufficiently high concentrations can pose a risk to public health.

• Cyanotoxin: Toxin produced by cyanobacteria. These toxins include liver toxins, nerve toxins, and skin toxins. Also sometimes referred to as “algal toxin”.

• Level 1 Assessment is a study of the water system to identify the potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

• Level 2 Assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

• PFAS: Per- and polyfluoroalkyl substances (PFAS) are a group of man-made chemicals applied to many industrial, commercial and consumer products to make them waterproof, stain resistant, or nonstick. PFAS are also used in products like cosmetics, fast food packaging, and a type of firefighting foam called aqueous film forming foam (AFFF) which are used mainly on large spills of flammable liquids, such as jet fuel. PFAS are classified as contaminants of emerging concern, meaning that research into the harm they may cause to human health is still ongoing.

• Master Meter (MM): A master meter is one that connects a wholesale public water system to consecutive public water system(s). This type of meter monitors the amount of water being sent to the consecutive system(s) and can also be used to determine the quality of water being delivered to the consecutive system(s)

* Parts per Million (ppm) or Milligrams per Liter (mg/L) are units of measure for concentration of a contaminant. A part per million corresponds to one second in a little over 11.5 days.
* Parts per Billion (ppb) or Micrograms per Liter (μg/L) are units of measure for concentration of a

contaminant. A part per billion corresponds to one second in 31.7 years.

* The “<” symbol: A symbol which means less than. A result of <5 means that the lowest level that could be detected was 5 and the contaminant in that sample was not detected.
* Picocuries per liter (pCi/L): A common measure of radioactivity.