# Annual Drinking Water Quality Report

## Margate City Water Division
## For the Year 2022

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.

**We are pleased to report that our drinking water is safe and meets Federal and State requirements.**

The Margate City Water Division routinely monitors contaminants in your drinking water according to Federal and State laws. The table on the back shows the results of our monitoring for the period of January 1st to December 31st, 2022. 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 by-products 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.

# DEFINITIONS

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

**Non-Detects (ND)** - laboratory analysis indicates that the contaminant is not present.

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

**Treatment Technique (TT)** - a treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

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

**Maximum Contaminant Level Goal** - the "Goal" (MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

**Secondary Maximum Contaminant Level (SMCL)** - Federal drinking water measurements for substances that do not have an impact on health. These reflect aesthetic qualities such as odor, taste or appearance. Secondary standards are recommendations, not mandates.

**Recommended Upper Level (RUL)** - Secondary contaminants have a recommended upper level (RUL).

The Safe Drinking Water Act regulations allow monitoring waivers to reduce or eliminate the monitoring requirements for asbestos and synthetic organic chemicals (SOC's). Our system received monitoring waivers for asbestos and SOC's. The waivers are in effect until further notice.

**As you can see by the table, our system had no violations. We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some contaminants have been detected. The EPA has determined that your water IS SAFE at those levels.**

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.

**MCL's are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.**

**Special Considerations Regarding Children, Pregnant Women, Nursing Mothers, and Others:** Children may receive a slightly higher amount

of a contaminant present in the water than do adults, on a body weight basis, because they may drink a greater amount of water per pound of body weight than do adults. For this reason, reproductive or developmental effects are used for calculating a drinking water standard if these effects occur at lower levels than other health effects of concern. If there is insufficient toxicity information for a chemical (for example, lack of data on reproductive or developmental effects), an extra uncertainty factor may be incorporated into the calculation of the drinking water standard, thus making the standard more stringent, to account for additional uncertainties regarding these effects. In the cases of lead and nitrate, effects on infants and children are the health endpoints upon which the standards are based.

**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.

**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. The Margate City Water Division 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 drinking 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 (1-800-426-4791) or at http://www.epa.gov/safewater/lead.

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 | Violation Y/N | Level Detected | Test Date | Units of Measurement | MCL | MCLG | Likely Source of Contamination |
|---|---|---|---|---|---|---|---|
| ***Radioactive Contaminants:*** | | | | | | | |
| *Combined Rodium* | *No* | *1.5* | *04/27/2021* | *pCi/l* | *15* | | *Erosion of natural deposits* |
| ***Inorganic Contaminants:*** | | | | | | | |
| *Copper* | *No* | *0.17 No samples exceeded* | *09/16/2021* | *ppm* | *AL=1.3* | *1.3* | *Corrosion of household plumbing systems; erosion of natural deposits* |
| *Lead* | *No* | *1.9 No samples exceeded* | *09/16/2021* | *ppb* | *AL=15* | *0.0* | *Corrosion of household plumbing systems; erosion of natural deposits* |
| *Sulfate* | *No* | *7.7* | *04/27/2021* | *ppm* | *250* | | *Erosion of natural deposits* |
| *Sodium* | *No* | *22.2* | *04/27/2021* | *ppm* | *50* | | *Erosion of natural deposits* |
| ***Volatile Organic Contaminants: Chlorine By-Products*** | | | | | | | |
| *TTHMs (Total trihalomethanes)* | *No* | *5.0-16.0 range* | *Annual Avg. 11.0* | *ppb* | *80* | | *By-product of drinking water chlorination* |
| *HAA5s (Haloacetic Acids)* | *No* | *3.0-6.0* | *Annual Avg. 5.0* | *ppb* | *60* | | *By-product of drinking water chlorination* |
| ***Secondary Contaminants:*** *The following contaminants are considered secondary contaminants. Margate voluntarily provides the information in this report.* | | | | | | | |
| *Chloride* | *No* | *9.0* | | *ppm* | *250* | | *Erosion of natural deposits* |
| *Iron* | *No* | *61.9* | | *ppb* | *300* | | *Erosion of natural deposits* |
| *Manganese* | *No* | *14.8* | | *ppb* | *50* | | *Erosion of natural deposits* |
| *Hardness (CaCO3)* | *No* | *55.9* | | *ppm* | *50 - 250* | | |
| *pH* | *No* | *7.2* | | — | *6.5 - 8.5* | | |

As you see in the test result table, certain contaminants are tested at different times. Because of the excellent quality of Margate's drinking water, organics, inorganics and secondaries are tested every 3 years and radiologicals are tested every 6 years. Margate tests its water weekly for bacteria to make sure it is safe for its residents.

"The New Jersey Department of Environmental Protection (NJDEP) has completed and issued the Source Water Assessment Report and Summary for this public water system, which is available at www.state.nj.us/dep/swap/ or by contacting the NJDEP, Bureau of Safe Drinking Water at 609-292-5550."

## Margate City Water Division - PWSID #0116001

Margate City Water Division is a public community water system consisting of 5 well(s), 0 wells under the influence of surface water, 2 purchased ground water source(s), and 0 purchased surface water source(s).

This system's source water comes from the following aquifer(s): Atlantic City "800-foot" sand aquifer, Kirkwood-Cohansey water-table aquifer system.

## Susceptibility Ratings for Margate City Water Division 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.

| | Pathogens | | | Nutrients | | | Pesticides | | | Volatile Organic Compounds | | | Inorganics | | | Radio-nuclides | | | Radon | | | Disinfection Byproduct Precursors | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sources | 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 - 5 | | | 5 | | | 5 | | | 5 | | | 5 | | | 5 | | | 5 | | | 5 | 5 | | |
| 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 by products are formed when the disinfectants (usually chlorine) used to kill pathogens react with dissolved organic material (for example leaves) present in surface water.

**RECENT WATER TEST RESULTS – ON THE INTERNET**

All of Margate City water sampling requirements and results can be found on the NJDEP Drinking Water Watch page on the internet. To get to this page go to the NJDEP home page, click the middle link (drinking water). This will lead you to Drinking Water Customers, click the link "Your utility and its Water Quality" which sends you to the Drinking Water Watch page. After you click the link enter Margate's PWSID #0116001 in the box and click search. This will bring up the Margate Water Division and all up to date results.

**ATTENTION – LAWN SPRINKLING RESTRICTIONS**

Margate City is enforcing its ordinance to restrict lawn watering to provide better water pressure to all areas of the city. From **May 1 through October 1** addresses with **even numbers can water on Tuesday, Thursday and Saturday** and addresses with **odd numbers can water on Monday, Wednesday and Friday**.

**TIPS FOR CONSERVING WATER**

- Install water conserving showerheads and faucet aerators in the bathroom and kitchen
- Turn off faucets when not in use, such as brushing your teeth or washing the dishes
- Run washing machines and dishwashers only when they are full
- Use a broom to sweep the sidewalk, rather than a hose
- Water lawns only as needed. In New Jersey, usually one inch of water per week is all that is needed to maintain a healthy lawn. Irrigation timers should be turned off during and after rainfall
- Use mulch and native plants to conserve water in the garden

We take pride in the quality of our water in the City of Margate and routinely test your drinking water for many different compounds. If you have any questions about this water quality report or water quality in general, please call Jim Dickerson, the licensed operator (609-822-5038) at the Margate City Public Works Department.

**AFTER HOURS**

While you may call the Public Works Department Monday to Friday, 8:00 A.M. to 4:00 P.M., at 609-822-5038 for any water problems you may also call the Police Department after hours or weekends at 609-822-1151 (do not call 911) in case of any emergency such as water line breaks. The Police Department will forward the message to Public Works employees to respond.

We at the Margate City Water Division work hard to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.


City of Margate
PUBLIC WORKS DEPARTMENT
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