City Staff are STATE CERTIFIED in their Fields

Water Treatment Plant Operators, Water Service Distribution Operators, Waste Water Treatment Plant and Waste Water Collection Operators have all successfully passed the State Board Exam.

Water Treatment Plant Improvements

To keep water quality, technology and operations in top form and to meet the Safe Drinking Water Act (SDWA) requirements, equipment maintenance and replacement is an ongoing process. During the year we upgraded our chlorine alarm system to feature flashing lights inside and out of the front and rear of the building, and also at the Graceview Pumping Station for the safety of the public and water plant personnel. We also formed an extensive Maintenance List to follow, along with new improvements we are working towards. Many valves have been replaced in the plant with many more to be replaced in 2019.

Planned Upgrades for 2019 To address the needs of our aging infrastructure, the Water Distribution Team will continue to replace pipes, valves and water lines in the system. A contractor has been selected to begin upgrading the control room and the filtration system engineered by GHD Engineering. This work will begin on or about June 1.

Precautions for Special Risk Groups

"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. We are responsible for providing high quality drinking water, but we 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 or at http://www.epa.gov/safewater/lead."

Immunocompromised persons such as those undergoing chemotherapy, those with HIV/AIDS or other immune system disorders, those having undergone organ transplants, some elderly and infants, can be particularly vulnerable to contaminants in drinking water. These special risk groups should seek advice from their health care providers.

City of Havre de Grace
711 Pennington Avenue
Havre de Grace, MD 21078

WATER QUALITY
CONSUMER CONFIDENCE REPORT
HAVE QUESTIONS? We're here for you.

City Water Plant: ***410-939-1070 (24 hrs a day)***
Department of Public Works: ***410-939-1800***
Environmental Protection Agency: ***800-426-4791***

Consumer Confidence Report
2018
Water Quality
City of Havre de Grace

The City of Havre de Grace is pleased to present the 21st Annual Consumer Confidence Report on Water Quality.

This report shows the quality of the water as pumped to your home from *Jan. 1 to Dec. 31, 2018.*

Explains the likely sources of contaminants,

Offers warnings for people in special risk groups; and,

Recommends measures all residents can take to help preserve the quality of water.

A brief summary of the results of our testing:
Our water is tested by two different laboratories. The testing results indicate that the City's drinking water meets or exceeds the standards required by *MDE/EPA* - the Maryland Department of the Environment and the Environmental Protection Agency.

Source of this Water Assessment is available on MDE's website at:

https://mde.maryland.gov/programs/Water/water supply/Source Water Assessment Program/Documents/Havre%20de%20Grace.pdf

Important to know: *The EPA has* determined *that your water is safe.* The Susquehanna River is the source of your drinking water. The EPA (Environmental Protection Agency) recognizes that all drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some 22 known contaminants. Both Federal and State laws require the City to routinely monitor the levels of these possible contaminants in your drinking water.

Preserve Water Quality - Recommended Measures

- Flush your water heater once a year.
- Clean the screens on your spigots.
- When water has not been used for several hours, run the cold water at least 30 seconds to insure you are receiving fresh water from the main instead of dormant water in your pipes.
- Make sure the water shut-off valve inside your home is operable in case you have a leak and need to shut-off the supply immediately.

Any changes in your water pressure, taste or color should be reported as soon as possible. Call the City's Water Plant at **410-939-1070**. Staff are on site 24 hrs a day, 365 days a year.

DEFINITIONS

Action Level – The concentration of a contaminant which can trigger improved treatment techniques or other requirements which a water system must follow.

Compliance Level-The value used to determine compliance with EPA or State regulations.

Intestinal Parasites: Microorganisms like Cryptosporidium and Giardia lamblia can cause gastrointestinal illness such as cramps, diarrhea, vomiting.

Maximum Contaminant Level (MCL): *Maximum Allowed* is the highest level of a contaminant that is allowed in drinking water.

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 an extra margin of safety.

Ninetieth Percentile (90th %) for lead & copper testing only. Ninety percent of the homes where the tap water was tested, are at or below this value. EPA only requires the voluntary testing of homes built between 1983 and 1986, where lead solder has been used in the plumbing.

Parts per million (ppm), per billion (ppb), per trillion (ppt) Measurement units for the level of contaminants in water.
One ppm corresponds to a single penny in $10,000;
One ppb corresponds to one penny in $10,000,000 and
One ppt corresponds to one penny in $10,000,000,000.

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

Total Coliform- Bacteria that are naturally present in the environment. They are used to indicate the presence of other potentially-harmful bacteria. CL is < 5 % positive each month.

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

Turbidity - The cloudy appearance of water caused by the presence of suspended matter. Turbidity has no health effects. However, it can interfere with disinfection and provide a medium for microbial growth. **NTU** (Nephelometric Turbidity Units) is a unit of measure for the turbidity of water. A turbidity level of 5.0 NTU is just noticeable to the average person.

Unregulated Contaminants- Unregulated contaminant monitoring helps EPA to determine where certain contaminants occur and whether it needs to regulate those contaminants.

Contaminant	Violation Y/N	Level Detected	Unit of Measure	MCL	MCLG	Likely source of contamination
RADIAOCTIVE CONTAMINANTS						
Beta/photon emitters	N	ND-2013 due again 2022	mrem/yr	4	0	Decay of natural and man-made deposits
Alpha emitters	N	ND-2013 due again 2022	pCi/L	15	0	Erosion of natural deposits
Combined radium	N	ND-2004 due again 2022	pCi/L	5	0	Erosion of natural deposits
INORGANIC CONTAMINANTS						
Barium	N	.024	ppm	2.0	2.0	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Copper	N	0.06 Next test 2019	ppm	AL= 1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride	N	0.14 – 0.88	ppm	4.0	4.0	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Lead	N	ND 2016 Next test 2019	ppm	AL= .015	0.0	Corrosion of household plumbing systems, erosion of natural deposits
Nitrate (as Nitrogen)	N	1.41	ppm	10.0	10.0	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
SYNTHETIC ORGANIC CONTAMINANTS						
Atrazine	N	0.27	ppb	3	3	Runoff from herbicide used on row crops
DISINFECTION BY PRODUCTS						
Chlorine	N	0.60 - 2.87	ppm	4.0	4.0	Drinking water chlorination
TTHM Total Trihalomethanes	N	14.1 - 78.4 (avg. 46. ppb)	ppb	80.0 rolling avg.	NA	By-product of drinking water chlorinating CL=Rolling yearly avg. by quarter
HAA5 Haloacetic acids	N	15.6 - 54.6 (avg. 43. ppb)	ppb	60.0	NA	By-product of drinking water chlorinating CL=Rolling yearly avg. by quarter
MICROBIOLOGICAL CONTAMINANTS						
Cryptosporidium	N	Not detected	TT		0	Human and animal fecal wastes
Giardia Lamblia	N	Not detected	TT		0	Human and animal fecal wastes
Total Coliforms	N	0.00		<5%	0	Naturally present in the environment
Total Organic Carbon	N	1.03 - 3.73 range	TT	TT	NA	Naturally present in the environment CL based on % removal
Turbidity	N	.011 - .145 range	NTU	0.3	NA	Soil run-off
NON-REGULATED CONTAMINANTS						
Sodium	N	5.58 - 46.4	ppm	NA	NA	Naturally present in the environment
Chloride	N	26 - 56	ppm	NA	NA	Naturally present in the environment
Alkalinity	N	30 - 74	ppm	NA	NA	Naturally present in the environment
Hardness	N	40 - 116	ppm	NA	NA	Naturally present in the environment
pH	N	6.86 - 7.85	STD	NA	NA	Soil run-off