

The City of Havre de Grace is pleased to present the 18th Annual Consumer Confidence Report on Water Quality.

This report shows the quality of the water as pumped to your home from January 1 to December 31, 2015, **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.

Important to know: *The EPA has determined that your water is safe.*

The Susquehanna River is the source of your drinking water. The Environmental Protection Agency (EPA) recognizes that all drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some 22 known contaminants.

Federal and State laws require the City of Havre de Grace to routinely monitor the levels of these possible contaminants in your drinking water.

A brief summary of the results of our testing:

Testing revealed that only one contaminant, TTHM (Total Trihalomethanes) a byproduct of chlorine, exceeded the acceptable level of 80 parts per billion. Consequently, all homeowners were notified in the area. A 2nd test was conducted to confirm initial findings. This too proved positive. A thorough investigation Revealed a faulty Pressure Reducing Valve was the cause of the problem. The City immediately replaced the valve. As a result, the system is open with freshwater now flowing through the lines. Further testing shows the problem has been corrected.

Improvements to the City's Water Treatment Plant

Equipment maintenance and replacement is an ongoing process to keep the water quality, technology and operations in top form and to meet the Safe Drinking Water Act (SDWA) requirements.

The chlorine system was completely updated with a state-of-the-art system as were three other chemical feed systems and pumps. Many valves have been replaced in the plant with many more to be replaced in 2016. Intake lines from the river have been inspected and repairs made as needed. All towers have been inspected.

City Staff are STATE CERTIFIED in their Fields

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

Planned Upgrades for 2016

To address the needs of our aging infrastructure, the Water Distribution Team is replacing many pipes, water lines, and valves in the system. The Water Plant will be renovating four river pumps, increasing laboratory size, updating lab equipment and purchasing new analyzers. The Water Plant will also be replacing the aging roof over the basin. The water towers will receive three rebuilt booster pumps.

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 the 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. Please call the City's Water Plant at 410-939-1070. Staff on site 24 / 7 / 365.

Precautions for Special Risk Groups

Immuno-compromised 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.

For more information, please contact:

City Water Plant: **410-939-1070** (24hrs /7days/365yr)

Dept. of Public Works: 410-939-1800

Environmental Protection Agency: 1-800-426-4791

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 & Giardia lamblia can cause gastrointestinal illness (e.g., diarrhea, vomiting, and cramps).

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
RADIOACTIVE CONTAMINANTS						
Beta/photon emitters	N	ND-2013	pCi/L	4	0	Decay of natural and man-made deposits
Alpha emitters	N	ND-2013	pCi/L	15	0	Erosion of natural Deposits
Combined radium	N	ND-2004	pCi/L	5	0	Erosion of natural Deposits
INORGANIC CONTAMINANTS						
Barium	N	.021	ppm	2.0	2.0	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Copper	N	0.13 2013	ppm	AL= 1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride	N	.39-.82	ppm	4.0	4.0	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer & aluminum factories
Lead	N	ND-2013	ppm	AL= .015	0.0	Corrosion of household plumbing systems, erosion of natural deposits
Mercury (inorganic)	N	ND-2014	ppb	2.0	2.0	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland
Nitrate (as Nitrogen)	N	1.71	ppm	10.0	10.0	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
DISINFECTION BY PRODUCTS						
Chlorine	N	.24-2.32	ppm	4.0	4.0	Drinking water chlorination
TTHM Total Trihalomethanes	Y	14.4-174 range Rolling location avg.	ppb	80.0 rolling avg.	NA	By-product of drinking water chlorinating CL=Rolling yearly avg. by quarter
-HAA5' Haloacetic acids	N	12.6 to 80.9 range Rolling location avg.	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	4%		<5%	0	Naturally present in the environment
Total Organic Carbon	N	.7 to 2.4 range	TT	TT	NA	Naturally present in the environment CL based on % removal
Turbidity	N	.011-.450 range	NTU	<0.5	NA	Soil run-off
NON-REGULATED CONTAMINANTS						
Sodium	N	6.61 to 36.85	ppm	NA	NA	Human and animal fecal wastes
Chloride	N	35 to 62	ppm	NA	NA	Human and animal fecal wastes
Alkalinity	N	59 to 78	ppm	NA	NA	Naturally present in the environment
Hardness	N	70 to 121	ppm	NA	NA	Naturally present in the environment
pH	N	7.5 to 7.58	STD	NA	NA	Soil run-off