SHELBY MUNICIPAL UTILITIES
DIVISION OF WATER
Annual Water-Quality Report for year 2015

We are pleased to present this summary of the quality of water provided to you during the year 2015. The Safe Drinking Water Act(SDWA) requires that water utilities issue an annual "Consumer Confidence Report" to customers, in addition to other notices required by law. This report will detail where our water comes from, what it contains and the risks that our water testing and treatment process are designed to prevent. The Shelby Municipal Utilities-Division of Water is totally committed to providing you, our customers-owners, with the safest and most reliable water supply possible. Informed customers are our best allies in maintaining safe drinking water. The City of Shelby currently has an unconditional license to operate its public water system.

Water Sources

The City of Shelby obtains its raw water from two different sources. Reservoir #2 is located at the end of Mack Avenue and is filled with water pumped from the Black Fork River. Reservoir #3 is located on London West Road at the end of Broadway Street and is filled with water pumped from Marsh Run Creek. Reservoir #2 holds about 250 million gallons of water and Reservoir #3 holds about 338 million gallons of water. This gives us about 588 million gallons of raw water storage. The Shelby Water Plant pumps on an average of 1.20 MGD. With the two reservoirs, we have about a one year supply of raw water.

Public Participation

Concerns and comments about your drinking water are encouraged by public participation at the regular meetings of the Shelby City Council. The Council meets on the first and third Mondays of each month at 7:00 PM at the Shelby Justice Center located at 29 Mack Avenue.

What are the sources of contamination to drinking water?

The sources of drinking water, for both tap and bottled water, include rivers, lakes, streams, wells, ponds, reservoirs, and springs. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material. Water can also pick up substances resulting from the presence of animals or human activity.

Contaminants that may be present in source water include these: [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 agricultural, 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 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, EPA 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 and bottle water may reasonably be expected to contain at least small amounts of some contaminants. The presence of some contaminants does not necessarily pose a health risk. You can call the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791 for more information.

Who needs to take special precautions

Some people may be more vulnerable than the general population to the contaminants in drinking water. Such as immuno-comprised persons with cancer who are undergoing chemotherapy, have undergone organ transplants, some elderly, infants and with HIV/AIDS or other immune system disorders. 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 at 1-800-426-4791.

About your drinking water

The EPA requires regular sampling to ensure drinking water safety. The Shelby Water Plant conducted sampling for contaminants [bacteria; inorganic; radiological; synthetic organic; volatile organic] during 2015. Samples were collected for over 40 different contaminants, most of which were not detected in the City of Shelby's 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, is more than one year old. Also in 2013, we sampled for lead and copper plus asbestos. The results for lead and copper can be found within this report. The results for asbestos were BDL.

Disinfection By- Products

In 2013, the Shelby Water Plant was required to use two new and different sampling sites for Total Trihalomethanes. The RAA for Phil's Place was 51.66 ug/l and for Pioneer School was 62.75 ug/l. The MCL for each site is 80 ug/l. Some people who drink water containing trihalomethanes in excess of the MCL, over many years, may experience problems with their liver, kidneys, central nervous system and may have an increased risk of getting cancer. The Water Capital Improvement charge on your monthly bill is used to fund the upgrades at the Water Treatment Plant. The Shelby Water Plant is yielding good results for the treatment of TTHM's.

Susceptibility Analysis

The City of Shelby public water system uses surface water drawn from the Black Fork River and Marsh Run Creek. Surface waters are by their nature susceptible to contamination, and numerous potential contamination sources along their banks make them more so. The protection areas around the Black Fork River and Marsh Run Creek include a moderate number of potential contamination sources, including agricultural runoff, silage, above ground storage tanks, pesticide/fertilizer, confined animal feedlot, farm machinery repair, junk yards petroleum storage, industrial storm water, lagoons home construction, electrical substations, auto repair, landfill runoff, pasture and other commercial sources. As a result, the drinking water supplied to the City of Shelby's public water system is considered to have a high susceptibility to contamination.

The City of Shelby's public water system treats this source water to meet drinking water quality standards, but no single treatment technique can address all potential contaminants. Implementing measures to protect the Black Fork River, Marsh Run Run Creek and the local aquifer can further decrease the potential for water quality impacts.

Harmful Algae Bloom

Both reservoirs and the finished water were tested for algae toxins during the 2015 season. All samples taken were below the Ohio EPA threshold limits.

Questions and information

If you have any questions or would like further information about this Consumer Confidence Report, Shelby's Source Water Assessment Report, the Safe Drinking Water Act or the Shelby Water Treatment Plant, please use the following contacts:

Brad Brown (Water Plant Superintendent)
Shelby Water Plant 419-342-2171
E-mail: bradbrown@shelbyohio.org
www.shelbyohio.org
Safe Drinking Water Hotline: 1-800-426-4791
Ohio EPA 614-644-2752
Division of Drinking and Ground Water
http://www.epa.gov/safewater

WATER QUALITY DATA TABLE

CONTAMINANT	UNITS	DATE TESTED	MCL	MCLG	HIGHEST DETECTED	DETECTED RANGE	VIOLATION	MAJOR SOURCES OF CONTAMINANT
MICROBIOLOGICAL								
Turbidity	NTU	every 4 hrs	0.3	0	0.26	0.05-0.26	no	soil runoff
Turbidity	% of samples meeting standards		100%	100%	100%	100%-100%	no	soil runoff
Total Organic Carbon (TOC)	ppm-mg/l	monthly	TT	N/A	2.12	1.76-2.12 RAA 2.05	no	naturally present in the environment
INORGANICS								
Lead	ppb-ug/l	7/17/13 to	AL=15.5	0	4.46	BDL-4.56	no	corrosion of household plumbing
Copper	ppm-mg/l	8/7/13	AL=1.3	1.3	0.083	BDL-.083	no	
Barium	ppb-ug/l	7/13/15	2000	2000	19.3	19.3	no	discharge from drilling wastes & metal refineries; erosion of natural deposits
Nitrate	ppm-mg/l	monthly	10	10	0.896	.157-.896	no	runoff from fertilizer use; leaching septic tanks; sewage; erosion of natural deposits
Fluoride	ppm-mg/l	daily	4	4	1.19	.80-1.19	no	additive to promote strong teeth;erosion of natural deposits;fertilizer & aluminum factory discharge
SYNTHETIC ORGANIC CONTAMINANTS (SOC) INCLUDING PESTICIDES AND HERBICIDES								
Alachlor	ppb-ug/l	5/11/15	2	0.2	< 0.2	BDL	no	runoff from herbicide
Atrazine	ppb-ug/l	5/11/15	3	0.3	< 0.3	BDL	no	runoff from herbicide
Simazine	ppb-ug/l	5/11/15	4	0.4	< 0.4	BDL	no	runoff from herbicide
DISINFECTION-BY-PRODUCTS								
Haloacetic Acids Five (HAA5)	ppb-ug/l	quarterly	MCL	MCLG	RAA	RANGE	violation	by-products of drinking water chlorination
Phil's Place	ppb-ug/l	quarterly	60	0	21.29	17.20-27.92	no	
Pioneer School	ppb-ug/l	quarterly	60	0	22.58	17.29-36.30	no	
TTHMS-Total Trihalomethanes	ppb-ug/l	quarterly	MCL	MCLG	RAA	RANGE	violation	by-products of drinking water chlorination
Phil's Place	ppb-ug/l	quarterly	80	0	51.66	32.90-81.15	no	
Pioneer School	ppb-ug/l	quarterly	80	0	62.75	44.30-76.50	no	
RESIDUAL DISINFECTANTS								water additive used to control microbes
Total Chlorine	mg/l	monthly	MDRL-4.0 mg/l		2.00	.40-2.00	no	

Definitions of some terms used in this report

Maximum Contaminant Level [MCL]-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 of health. **Treatment Technique [TT[**-A required process intended intended to reduce the level of a contaminant. **Action Level [AL]**-The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

PPM-parts per million or milligrams per liter [mg/l]
PPB-parts per billion or micrograms per liter [ug/l]
RAA-Running Annual Average
BDL-Below Detection Limit
MDRL-Maximum Disinfectant Residual Level

Nitrate in drinking water at levels above 10 ppm is a health risk for infants 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 due to rainfall or agricultural activity. If you are caring for an infant, you should ask advice from your health care provider. In 2015, the highest nitrate level result was 0.896 ppm. **Turbidity** is a measurement of the cloudiness of water and is an indication of the effectiveness of our filtration system. The turbidity limit set by the EPA is 0.30 NTU in 95% of the daily samples. In 2015, the highest recorded turbidity result was 0.26 NTU. 100% of the daily samples met the turbidity limits.

Information about lead in drinking water

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 Shelby Water Treatment Plant 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 the 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 :

http://www.epa.gov/safewater/lead.

Shelby Municipal Utilities
Division of Water
Consumer Confidence Report
For 2015

Shelby OHIO EST 1834

Shelby OHIO EST 1834