Facts about your drinking water from Bryan Municipal Water Department

We are pleased to provide you with our Sixteenth Annual Water Quality Report. This report is designed to provide information to you, the consumer, on the quality of the drinking water we supply. We hope it helps you understand the efforts we make to continually provide a fresh, safe and abundant supply of water. This report contains general health information, water quality test results, and contacts for water department personnel.

Water Quality Report

2013 Monitoring Data **Sixteenth Annual**

The Source of Your Water

Bryan was founded in 1840 and quickly became known as the "Fountain City" due to its many flowing artesian wells. An artesian well has naturally occurring pressure that pushes the water upward like a fountain. Your drinking water today still comes from artesian wells. Currently, seven artesian wells provide Bryan with water. They are distributed around the northeast corner of the City.

Water Operator Eugene Wilson checks flows and pressures as part of our annual system flushing and hydrant inspection.

We are extremely dependent on our groundwater supply and therefore must protect it from contamination. To do this, we have prepared a Well Head Protection Plan. Preparation of this plan included determining where the groundwater that supplies our system comes from, identifying activities that have the potential to pollute the groundwater, and developing a management strategy to protect the area from contamination. Part of the plan included the installation of signs around the area to alert motorists that they are entering a groundwater protection area and to please report spills. Anyone wishing to view this plan may do so by contacting us.

The Safe Drinking Water Act amendments of 1996 established the Federal Source Water Protection and Assessment Program (SWAP), which requires that a "source water assessment" be completed for all public water systems. Source water assessments are similar to well head protection plans with the additional requirement of a susceptibility analysis. The Ohio Environmental Protection Agency has completed a susceptibility analysis for the City of Bryan, and it is summarized in the following paragraph.

The aquifer that supplies drinking water to the City of Bryan has a moderate susceptibility to contamination, due to the sensitivity of the aquifer in which the drinking water wells are located and the existence of several potential contaminant sources within the protection zone. This does not mean that the wellfields will become contaminated, only that conditions are such that the ground water could be impacted by potential contaminant sources. Future contamination may be avoided by implementing protective measures. More information is available by calling the water department at 419-633-6100 or the Ohio Environmental Protection Agency at 614-644-3020.

Water Quality Testing

The Environmental Protection Agency requires regular sampling to ensure drinking water safety. Bryan Water Department conducted all required sampling and **met or exceeded all federal and state standards** for safe drinking water. The following chart contains information on contaminants that were found in the City of Bryan's drinking water. Some contaminants are monitored less than once per year because their concentration does not change frequently. Therefore, some of our data 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
Inorganic Contaminants							
Barium (ppm)	2	2	0.150	NA	No	2013	Erosion of natural deposits; Discharge from metal refineries; Discharge of drilling wastes
Fluoride (ppm)	4	4	1.25	NA	No	2013	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Copper (ppm)	1.3	AL = 1.3	0.54	NA	No	2011	Corrosion of household plumbing systems; Erosion of natural deposits
	Zero of twenty samples were found to have copper in excess of the Action Level of 1.3 ppm.						
Lead (ppb)	0	AL = 15	6.8	NA	No	2011	Corrosion of household plumbing systems; Erosion of natural deposits
	Zero of twenty samples were found to have lead in excess of the Action Level of 15 ppb.						
Nitrate							
Nitrate (mg/L)	10	10	<0.10	NA	No	2013	Runoff from fertilizer use; Erosion of natural deposits
Asbestos							
Asbestos (mfl)	7	7	0	NA	No	2013	Decay of asbestos cement water mains; Erosion of natural deposits.
Radiological Contaminants							
Gross Alpha (pCi/L)	0	15	3	NA	No	2013	Erosion of natural deposits
Radium (pCi/L)	0	5	1	NA	No	2013	Erosion of natural deposits
Volatile Organic Contaminants							
Total Trihalomethanes (ppb)	0	80	14.7	NA	No	2013	By-product of drinking water chlorination
Bromoform (ppb)	NA	NA	0.74	NA	No	2013	By-product of drinking water chlorination
Bromodichloromethane (ppb)	NA	NA	5.1	NA	No	2013	By-product of drinking water chlorination
Chloroform (ppb)	NA	NA	4.5	NA	No	2013	By-product of drinking water chlorination
Dibromochloromethane (ppb)	NA	NA	4.4	NA	No	2013	By-product of drinking water chlorination
Residual Disinfectants							
Total Chlorine (ppm)	MRDL=4	MRDLG=4	0.7	.6 - .7	No	2013	Water additive used to control microbes
Disinfectant/Disinfection Byproducts Rule DS201 (IDSE samples see page 3)							
Total Trihalomethanes (ppb)	NA	80	36.5	NA	No	2013	By-product of drinking water chlorination
Total Haloacetic Acids (ppb)	NA	60	9.2	NA	No	2013	By-product of drinking water chlorination
Disinfectant/Disinfection Byproducts Rule DS202 (IDSE samples see page 3)							
Total Trihalomethanes (ppb)	NA	80	31.2	NA	No	2013	By-product of drinking water chlorination
Total Haloacetic Acids (ppb)	NA	60	9.2	NA	No	2013	By-product of drinking water chlorination

Definitions of terms contained in the above chart -

MCLG - Maximum Contaminant Level Goal is the level of a contaminant in drinking water which below there is no known or expected risk to health. MCLGs allow for a margin of safety. NA in this column denotes the contaminant is not yet fully regulated.
MCL - Maximum Contaminant Level is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
MRDL - Maximum Residual Disinfectant Level is the highest level allowed.
MRDLG - Maximum Residual Disinfectant Level Goal is the level at which below there is no known or expected risk to health.
ppm - Parts per Million or Milligrams per Liter (mg/L) are units of measure for concentration of a contaminant. A part per million corresponds to 1second in a little more than 11.5 days.
ppb - Parts per Billion or Micrograms per Liter (ug/L) are units of measure for concentration of a contaminant. A part per billion corresponds to 1 second in 31.7 years.
AL - Action Level is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
NA - Not Applicable
IDSE - Initial Distribution System Evaluation
pCi/L - A common measure of radioactivity.

Other interesting data about your drinking water
The following data varies slightly depending upon which of the seven wells we happen to be pumping from.

Total Alkalinity	313 mg/L	Total Hardness	327 mg/L (19 gpg)
Calcium	59 mg/L	Average pH	7.8
Magnesium	38 mg/L	Iron	.03 mg/L
Dissolved Oxygen	12.5 mg/L	Sodium	29 mg/L

We have a current, unconditioned license to operate our water system.

Potential 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. It can also 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.

Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer or 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 at 1-800-426-4791.

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels in your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for thirty seconds to two minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline at 1-800-426-4791.

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, 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 Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

"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. Bryan Water Department 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 or at http://www.epa.gov/safewater/lead."

Disinfectant / Disinfection Byproducts Rule concerning information in chart on Page 2 -

Under the Stage 2 Disinfectants/Disinfection Byproducts Rule (D/DBPR), our public water system was required by USEPA to conduct an evaluation of our distribution system. This is known as an Initial Distribution System Evaluation (IDSE), and is intended to identify locations in our distribution system with elevated disinfection byproduct concentrations. Disinfection byproducts are the result of providing continuous disinfection of your drinking water and form when disinfectants combine with organic matter naturally occurring in the source water. Disinfection byproducts are grouped into two categories, Total Trihalomethanes (TTHM) and Haloacetic Acids (HAA5). USEPA sets standards for controlling the levels of disinfectants byproducts in drinking water, including both TTHMs and Haa5s.

Water Quality Report

2013 Monitoring Data Sixteenth Annual

Standard Presort
U.S. Postage
Paid
Bryan, OH
Permit No. 128

BRYAN MUNICIPAL UTILITIES
841 EAST EDGERTON STREET
BRYAN OH 43506

Postal Customer
ECRWSS

This report is our Sixteenth Annual Water Quality Report. Its purpose is to provide you with information about your drinking water as required by the Environmental Protection Agency.

The quality of your drinking water is monitored every day by state certified operators. These operators are dedicated to providing you with an ample supply of safe water. Additionally, the Environmental Protection Agency requires continuing education for operators to maintain their certification.

We hope that you take the time to read this report. If you would like additional information or are interested in a tour of the water facilities, please contact us and we will be happy to assist you.

Bryan Municipal Utilities

Public Participation

Public participation is encouraged at regular meetings of the Board of Public Affairs on the first and third Tuesdays of each month. Meetings are held in the boardroom at 841 East Edgerton Street and begin at 5:00 p.m.

For more information on your drinking water, contact Water Superintendent Norm Echler at 419-633-6100, Water Treatment Plant personnel at 419-633-6160, or visit our web site at *www.cityofbryan.net.*