

Village of Russia Public Water System 2009 Consumer Confidence Report

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Ohio Environmental Protection Agency
Division of Drinking and Ground Waters

www.epa.ohio.gov/ddagw

Village of Russia, Public Water System
consumer confidence report
operation year 2009

Section 2: Introduction

The Russia Public Water System was established in March of 2009. This presented unique challenges for us as the daily usage gradually increased throughout the year. We have prepared the following report to provide information to you, the consumer, on the quality of our drinking water. Included within this report is general health information, water quality test results, how to participate in decisions concerning your drinking water and water system contacts.

Section 3: Source Water Information.

The Village of Russia Public Water System receives its drinking water from 2 - 70 GPM groundwater wells located at 200 N. Liberty Street. This water is then treated at our water treatment plant at that location. During this process, iron is removed, water is softened via ion exchange softeners and liquid chlorine is added to control the growth of bacteria.

The Ohio EPA is currently in the process of preparing a vulnerability assessment report for the Village of Russia Public Water System. Once this report is completed it will be included in next year's Consumer Confidence report.

Section 4: What are sources of contamination to drinking water?

The sources of drinking water both tap water and bottled water includes 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: (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.

In order to ensure that tap water is safe to drink, USEPA 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 (1-800-426-4791).

Section 5: Who needs to take special precautions?

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 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 (1-800-426-4791).

Section 6: About your drinking water.

The EPA requires regular sampling to ensure drinking water safety. The Village of Russia Public Water System conducted sampling for *bacteria; inorganic; radiological; synthetic organics; volatile organics* during 2009. Samples were collected for a total of 75 different contaminants most of which were not detected in the Village of Russia Public Water System 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, are more than one year old.

Section 7: Lead and Copper

The Village of Russia Public Water System completed all required testing for lead and copper. This testing was completed at 10 locations throughout the village. The Village exceeded the action level for Copper at some of these test locations. The Village of Russia Public Water System is continuing to work with the Ohio EPA return our water system to compliance. We have applied for and received a permit to install a poly-phosphate feed system at our water plant. We have completed three rounds of testing for lead and copper. Each subsequent test has shown lower levels of lead and copper than the previous tests. The Ohio EPA has requested that we continue to monitor for lead and copper to see if our levels continue on the downward trend. The hope is that we will be able to avoid adding any additional additives to that water to control the copper levels. We have tested our raw water and it does not show levels of lead or copper above the action level. The distribution system does not have any lead or copper lines in it. The copper levels above the action level in homes is believed to be coming from the water reacting with the copper lines installed in the homes. We believe that over time the water will leave very thin calcium deposits on the inside of the household water lines and these deposits will gradually reduce the copper levels that show up on our tests. Keep in mind that filtration or water conditioning equipment used in your home such as a water softener may prevent these calcium coatings from forming.

Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's disease should consult their personal doctor.

Volatile Organic Contaminants							
Ethylbenzene	700 ppb	700 ppb	2.16 ppb	<.05-2.16 ppb	No	2009	Discharge from petroleum refineries.
Isopropylbenzene			0.53 ppb	<.05-.53	No	2009	Unregulated Contaminate
N-Propylbenzene			0.64 ppb	<.05-.64	No	2009	Unregulated Contaminate
1,2,4 -Trimethylbenzene			0.75 ppb	<.05 -0.75 ppb	No	2009	Unregulated Contaminate
1,3,5 -Trimethylbenzene			1.13 ppb	<.05-1.13 ppb	No	2009	Unregulated Contaminate
Xylene – Total	10000 ppb	10000 ppb	10.3 ppb	<.05 -10.3 ppb	No	2009	Discharge from petroleum factories. Discharge from chemical factories.
Bromodichloromethane			34.8 ppb	<.05-34.8 ppb	No	2009	Unregulated Contaminate
Bromoform			9.42 ppb	<.05-9.42 ppb	No	2009	Unregulated Contaminate
Chloroform			27.35 ppb	<.05 -27.35 ppb	No	2009	Unregulated Contaminate
Dibromochloromethane			25.55 ppb	<.05-25.55 ppb	No	2009	Unregulated Contaminate
Styrene	100 ppb	100 ppb	0.58 ppb	<.05-0.58 ppb	No	2009	Discharge from rubber and plastic factories; Leaching from landfills.
Dichloromethane	5	0	1.06 ppb	<0.05-1.06	No	2009	Discharge from pharmaceutical and chemical factories.
HAA5 2 qtr average	N/A	60 ppb	14.54 ppb	17.57-11.5	No	2009	By-Product of drinking water Chlorination
TTHM 2 qtr average	N/A	80 ppb	74.96 ppb	87.97-61.95	No	2009	By-Product of drinking water Chlorination
The MCL for HAA5 and TTHM is a running 4 quarter average. The public water system is not in violation unless the average of the 4 quarter results exceeds the MCL.							
Residual Disinfectants							
Total Chlorine 4 quarter average	MRDL= 4 ppm	MRDLG= 4 ppm	Highest single sample. 1.82 ppm	4 quarter average. 1.25 ppm	No	2009	Water additive used to control microbes.

Section 9: Lead Educational Information

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 Russia Public Water System 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 at 800-426-4791 or at <http://www.epa.gov/safewater/lead>.

Section 10. License to Operate (LTO) Status Information

The Village of Russia Public Water system has a current, unconditioned license to operate our water system.

Section 11: Public Participation Information

How do I participate in decisions concerning my drinking water?

Public participation and comment are encouraged at regular meetings of Russia Village Council which meets on the second Wednesday of each month at the council chambers located at 232 West Main Street. Regular meetings begin at 7:00PM

For more information on your drinking water contact Mike Busse, Village Administrator at 937.526.4436.

Section 12: Definitions of some terms contained within this report.

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 a margin of safety.

Maximum Contaminant level (MCL): The highest level of contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Parts per Million (ppm) or Milligrams per Liter (mg/L) are units of measure for concentration of a contaminant. A part per million corresponds to one second in a little over 11.5 days.

Parts per Billion (ppb) or Micrograms per Liter ($\mu\text{g/L}$) are units of measure for concentration of a contaminant. A part per billion corresponds to one second in 31.7 years.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level (MRDL): The highest residual disinfectant level allowed.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of residual disinfectant below which there is no known or expected risk to health.

Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

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

The \leq symbol: A symbol which means less than. A result of ≤ 5 means that the lowest level that could be detected was 5 and the contaminant in that sample was not detected.

Picocuries per liter (pCi/L): A common measure of radioactivity.

IDSE: Initial Distribution System Evaluation