Some or all of these definitions may be found in this report:

Maximum Contaminant Level (MCL) - 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.

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 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 Goal (MRDLG) - the level of a 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.

Below Detection Levels (BDL) - laboratory analysis indicates that the contaminant is not present.

Not Applicable (N/A) - does not apply.

Parts per million (ppm) - or milligrams per liter, (mg/l). One part per million corresponds to one minute in two years or a single penny in $10,000.

Parts per billion (ppb) - or micrograms per liter, (µg/L). One part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.

Parts per trillion (ppt) - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in $10,000,000,000.

Parts per quadrillion (ppq) - one part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in $10,000,000,000,000.

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

Millirems per year (mrem/yr) - measure of radiation absorbed by the body.

Million Fibers per Liter (MFL) - a measure of the presence of asbestos fibers that are longer than 10 micrometers.

Nephelometric Turbidity Unit (NTU) - a measure of the clarity of water. Turbidity has no health effects. However, turbidity can provide a medium for microbial growth. Turbidity is monitored because it is a good indicator of the effectiveness of the filtration system.

Variances & Exemptions (V&E) - State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

Action Level (AL) - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system shall follow.

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

Spanish (Español) Este informe contiene información muy importante sobre la calidad de su agua beber. Tradúzcalo o hable con alguien que lo entienda bien.

Paintsville Municipal Water Works Quality Report 2016

Water System ID: KY0580340
General Manager: Bob Pack
606-789-2630
CCR Contact: Bob Pack
606-789-2630

Mailing address:
137 Main Street
Paintsville, KY 41240

Meeting location and time:
Utilities Building, 137 Main Street
First Monday each month at 5:00 PM

This report is designed to inform the public about the quality of water and services provided on a daily basis. Our commitment is to provide a safe, clean, and reliable supply of drinking water. We want to assure that we will continue to monitor, improve, and protect the water system and deliver a high quality product.

Our water is drawn from Paintsville Lake and it is a surface water source. The treatment plant is located at 304 Lake View Road and has the capacity to treat four million gallons in 16 hours of operation.

A Source Water Assessment Plan is available at the Paintsville Utilities office during business hours. The plan is an assessment of the delineated area around our source through which contaminants, if present, could migrate and reach our source water. It includes an inventory of potential sources of contamination within the delineated area and a determination of the water supply's susceptibility to contamination by that inventory. A total of five potential sources of contamination are located within the protection area. The majority are considered medium risk. Overall the water supply is not impacted at the present time by point sources. The greatest impact, although very slight, occurs from non-point source sedimentation.

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 may be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

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, and may pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include: Microbial contaminants, such as viruses and bacteria, (sewage plants, septic systems, livestock operations, or wildlife). Inorganic contaminants, such as salts and metals, (naturally occurring or from stormwater runoff, wastewater discharges, oil and gas production, mining, or farming). Pesticides and herbicides, (stormwater runoff, agriculture or residential uses). Organic chemical contaminants, including synthetic and volatile organic chemicals, (by-products of industrial processes and petroleum production, or from gas stations, stormwater runoff, or septic systems). Radioactive contaminants, (naturally occurring or from oil and gas production or mining activities). In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water to provide the same protection for public health.

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 infections. 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 (800-426-4791).

Information About Lead:

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. Your local 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 or at http://www.epa.gov/safewater/lead.

Quality On Tap!
Our Commitment Our Profession

The data presented in this report are from the most recent testing done in accordance with administrative regulations in 401 KAR Chapter 8. As authorized and approved by EPA, the State has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data in this table, though representative, may be more than one year old.

	Allowable Levels		Highest Single Measurement		Lowest Monthly %	Violation	Likely Source
Turbidity (NTU) TT * Representative samples of filtered water	No more than 1 NTU* Less than 0.3 NTU in 95% of monthly samples		0.1		100	No	Soil runoff
Barium [1010] (ppm)	2	2	0.017	0.017 to 0.017		Aug-16	No	Drilling wastes; metal refineries; erosion of natural deposits
Copper [1022] (ppm) sites exceeding action level 0	AL = 1.3	1.3	0.332 (90^{th} percentile)	0.0074 to 0.896		Aug-15	No	Corrosion of household plumbing systems
Fluoride [1025] (ppm)	4	4	0.6	0.6 to 0.6		Aug-16	No	Water additive which promotes strong teeth
Lead [1030] (ppb) sites exceeding action level 2	AL = 15	0	4 (90^{th} percentile)	0 to 31		Aug-15	No	Corrosion of household plumbing systems
Nitrate [1040] (ppm)	10	10	0.2	0.2 to 0.2		Feb-16	No	Fertilizer runoff; leaching from septic tanks, sewage; erosion of natural deposits
Total Organic Carbon (ppm) (measured as ppm, but reported as a ratio)	TT*	N/A	0.96 (lowest average)	1.00 to 1.27 (monthly ratios)		2016	**Yes**	Naturally present in environment.
*Monthly ratio is the % TOC removal achieved to the % TOC removal required. Annual average must be 1.00 or greater for compliance.								
Chlorine (ppm)	MRDL = 4	MRDLG = 4	1.52 (highest average)	0.52 to 2.08		2016	No	Water additive used to control microbes.
HAA (ppb) (Stage 2) [Haloacetic acids]	60	N/A	76 (high site average)	14 to 46 (range of individual sites)		2016	**Yes**	Byproduct of drinking water disinfection
TTHM (ppb) (Stage 2) [total trihalomethanes]	80	N/A	57 (high site average)	24 to 55 (range of individual sites)		2016	No	Byproduct of drinking water disinfection.

HAA(ppb) Individual Site	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Violation
005	64.75	58.75	28.00	29.00	Yes
006	64.75	55.75	24.00	26.25	Yes
082	76.25	69.75	29.50	30.50	Yes

Haloacetic acids, or HAA. Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.

Total organic carbon. Total organic carbon (TOC) has no health effects. However, total organic carbon, provides a medium for the formation of disinfection byproducts. These byproducts include trihalomethanes, or THMs, and haloacetic acids, or HAAs. Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer.

Lead. Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at 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 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (1-800-426-4791).

Violation	Begin Date	End Date	Explanation/Remedial Measure
2016-9950421: DBP Precursor Removal	12/1/2015	12/31/2015	Inadequate Disinfection Byproduct removal. Public Notification was provided.
2016-9950422: Haloacetic Acids (HAA)	1/1/2016	3/31/2016	Disinfection Byproduct MCL Exceeded. Public Notification was provided.
2016-9950425: Haloacetic Acids (HAA)	4/1/2016	6/30/2016	Disinfection Byproduct MCL Exceeded. Public Notification was provided.

Violations 2016-9950423 and 2016-9950424

Our water system recently violated a drinking water standard. Although this incident was not an emergency, as our customers, you have a right to know what happened and what we did (are doing) to correct this situation.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During May 2016 and June 2016, we did not complete all monitoring by failing to report or correctly report testing for turbidity. Therefore, we could not verify the quality of your drinking water to the primacy agency during that time.

Each month we are required to complete a Monthly Operation Report (MOR) and submit it to the Kentucky Division of Water by the tenth of the following month. This report includes daily testing results, chemicals added, and total volumes treated.

(2016-9950423) We failed to report the daily turbidity data in the MOR for May 2016.

(2016-9950424) We failed to report the daily turbidity data in the MOR for June 2016.

There is nothing you need to do. We submitted the reports to Division of Water and continue to do so monthly.

For more information, please contact Bob Pack at 606-789-2630 or P.O. Box 360 Paintsville, KY 41240

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

Secondary contaminants do not have a direct impact on the health of consumers and are not required in the Consumer Confidence Report. They are being included to provide additional information about the quality of the water.

Secondary Contaminant	Maximum Allowable Level	Report Level	Range of Detection	Date of Sample
Aluminum	0.05 to 0.2 mg/l	0.03	0.03 to 0.03	Aug-16
Chloride	250 mg/l	8	8 to 8	Aug-16
Copper	1.0 mg/l	0.043	0.043 to 0.043	Aug-16
Corrosivity	Noncorrosive	-1.91	N/A	Aug-16
Fluoride	2.0 mg/l	0.5	0.5 to 0.5	Aug-16
Iron	0.3 mg/l	0.011	0.011 to 0.011	Aug-16
Odor	3 threshold odor number	3	3 to 3	Aug-16
pH	6.5 to 8.5	7.1	7.1 to 7.1	Aug-16
Sulfate	250 mg/l	17.8	17.8 to 17.8	Aug-16
Total Dissolved Solids	500 mg/l	82	82 to 82	Aug-16

	Average	Range of Detection
Fluoride (added for dental health)	0.8	0.66 to 0.88
Sodium (EPA guidance level = 20 mg/L)	6.2	6.16 to 6.16