

# MCDOWELL COUNTY PSD ECKMAN WV3302405

## Consumer Confidence Report – 2020 Covering Calendar Year – 2019

This brochure is a snapshot of the quality of the water that we provided last year. Included are the details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards. We are committed to providing you with information because informed customers are our best allies. If you would like to observe the decision-making process that affect drinking water quality, please call MAVIS BREWSTER at 304-297-2622.

Your water comes from :

Source Name	Source Water Type
SPRING - MINE	Ground Water

Buyer Name	Seller Name
There are no additional purchases to display.	

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as those 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).

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 EPA's Safe Drinking Water Hotline (800-426-4791).

The sources of drinking water (both tap water and bottled water) included 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 sources water before we treat it include:

**Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, livestock operations and wildlife.

**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.

**Pesticides and herbicides**, which may come from a variety of sources such as storm water run-off, agriculture, and residential users.

**Radioactive contaminants**, which can be naturally occurring or the result of mining activity.

**Organic contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and also come from gas stations, urban storm water run-off, and septic systems.

In order to ensure that tap water is safe to drink, EPA prescribes regulation which limits the amount of certain contaminants in water provided by public water systems. We treat our water according to EPA's regulations. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Our water system has an estimated population of 118 and is required to test a minimum of 1 samples per month in accordance with the Total Coliform Rule for microbiological contaminants. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public.

### Water Quality Data

The following tables list all of the drinking water contaminants which were detected during the 2019 calendar year. The presence of these contaminants does not necessarily indicate the water poses a health risk. Unless noted, the data presented in this table is from the testing done January 1- December 31, 2019. The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

### Terms & Abbreviations

**Maximum Contaminant Level Goal (MCLG):** the "Goal" is the level of a contaminant in drinking water below which there is no known or expected risk to human health. MCLGs allow for a margin of safety.

**Maximum Contaminant Level (MCL):** the "Maximum Allowed" MCL 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.

**Secondary Maximum Contaminant Level (SMCL):** recommended level for a contaminant that is not regulated and has no MCL.

**Action Level (AL):** the concentration of a contaminant that, if exceeded, triggers treatment or other requirements.

**Treatment Technique (TT):** a required process intended to reduce levels of a contaminant in drinking water.

**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.

**Non-Detects (ND):** lab analysis indicates that the contaminant is not present.

**Parts per Million (ppm)** or milligrams per liter (mg/l)

**Parts per Billion (ppb)** or micrograms per liter (µg/l)

**Picocuries per Liter (pCi/L):** a measure of the radioactivity in water.

**Millirems per Year (mrem/yr):** measure of radiation absorbed by the body.

**Monitoring Period Average (MPA):** An average of sample results obtained during a defined time frame, common examples of monitoring periods are monthly, quarterly and yearly.

**Nephelometric Turbidity Unit (NTU):** a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person. Turbidity is not regulated for groundwater systems.

**Running Annual Average (RAA):** an average of sample results obtained over the most current 12 months and used to determine compliance with MCLs.

**Locational Running Annual Average (LRAA):** Average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

**Testing Results for: MCDOWELL COUNTY PSD ECKMAN**

Microbiological	Result	MCL	MCLG	Typical Source
No Detected Results were Found in the Calendar Year of 2019				

Regulated Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
BARIUM	12/3/2019	0.0351	0.0351	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
FLUORIDE	12/3/2019	0.1	0.1	ppm	4	4	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
NITRATE	6/19/2018	0.24	0.24	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
NITRATE-NITRITE	6/19/2018	0.24	0.24	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
SELENIUM	12/3/2019	6.3	6.3	ppb	50	50	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines

Lead and Copper	Monitoring Period	90 <sup>th</sup> Percentile	Range (low/high)	Unit	AL	Sites Over AL	Typical Source
COPPER, FREE	2017 - 2019	0.0529	0.0089 - 0.0857	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD	2017 - 2019	0.8	0.2 - 1	ppb	15	0	Corrosion of household plumbing systems; Erosion of natural deposits

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 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>.

Chlorine/Chloramines Maximum Disinfection Level	MPA	MPA Units	RAA	RAA Units
07/01/2019 - 07/31/2019	3	MG/L	2.2	MG/L

Unresolved Deficiency Date Identified	Facility	Comments
04/05/2016	WATER SYSTEM	McDowell County PSD failed to collect and/or submit Lead and Copper test results for the sampling period of January 1, 2012 to December 31, 2012. The PSD has since resumed all required testing and is returning to compliance.

Analyte	Facility	Highest Value	Unit of Measure	Month Occurred
No Detected Results were Found in the Calendar Year of 2019				

Radiological Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
No Detected Results were Found in the Calendar Year of 2019							

Secondary Contaminants-Non Health Based Contaminants-No Federal Maximum Contaminant Level (MCL) Established.	Collection Date	Highest Value	Range (low/high)	Unit	SMCL
CHLORIDE	12/3/2019	2.8	2.8	MG/L	250
SODIUM	12/3/2019	112	112	MG/L	1000
SULFATE	12/3/2019	320	320	MG/L	250

During the 2019 calendar year, we had the below noted violation(s) of drinking water regulations.

<b>Compliance Period</b>	<b>Analyte</b>	<b>Comments</b>
7/1/2019 - 9/27/2019	CONSUMER CONFIDENCE RULE	CCR REPORT
1/1/2014 - 12/31/2019	RADIONUCLIDES	MONITORING, ROUTINE MAJOR
1/1/2017 - 12/31/2019	ARSENIC TOTAL	MONITORING, ROUTINE MAJOR
1/1/2019 - 12/31/2019	NITRATE	MONITORING, ROUTINE MAJOR

There are no additional required health effects notices.

There are no additional required health effects violation notices.

<b>Water System</b>	<b>Type</b>	<b>Category</b>	<b>Analyte</b>	<b>Compliance Period</b>
No Violations Occurred in the Calendar Year of 2019				

There are no additional required health effects violation notices.

There are no additional required health effects notices.

Your CCR is available at [WWW://](#) . To receive a paper copy in the mail, please contact us at the phone number above.

# MCDOWELL COUNTY PSD TIDEWATER WV3302407

## Consumer Confidence Report – 2020 Covering Calendar Year – 2019

This brochure is a snapshot of the quality of the water that we provided last year. Included are the details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards. We are committed to providing you with information because informed customers are our best allies. If you would like to observe the decision-making process that affect drinking water quality, please call MAVIS BREWSTER at 304-297-2622.

Your water comes from :

Source Name	Source Water Type
WELL 1 (SPRING)	Ground Water

Buyer Name	Seller Name
There are no additional purchases to display.	

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as those 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).

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The sources of drinking water (both tap water and bottled water) included 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.

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**Organic contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and also come from gas stations, urban storm water run-off, and septic systems.

In order to ensure that tap water is safe to drink, EPA prescribes regulation which limits the amount of certain contaminants in water provided by public water systems. We treat our water according to EPA's regulations. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Our water system has an estimated population of 188 and is required to test a minimum of 1 samples per month in accordance with the Total Coliform Rule for microbiological contaminants. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public.

### Water Quality Data

The following tables list all of the drinking water contaminants which were detected during the 2019 calendar year. The presence of these contaminants does not necessarily indicate the water poses a health risk. Unless noted, the data presented in this table is from the testing done January 1- December 31, 2019. The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

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**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.

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**Parts per Billion (ppb)** or micrograms per liter (µg/l)

**Picocuries per Liter (pCi/L):** a measure of the radioactivity in water.

**Millirems per Year (mrem/yr):** measure of radiation absorbed by the body.

**Monitoring Period Average (MPA):** An average of sample results obtained during a defined time frame, common examples of monitoring periods are monthly, quarterly and yearly.

**Nephelometric Turbidity Unit (NTU):** a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person. Turbidity is not regulated for groundwater systems.

**Running Annual Average (RAA):** an average of sample results obtained over the most current 12 months and used to determine compliance with MCLs.

**Locational Running Annual Average (LRAA):** Average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

**Testing Results for: MCDOWELL COUNTY PSD TIDEWATER**

Microbiological	Result	MCL	MCLG	Typical Source
No Detected Results were Found in the Calendar Year of 2019				

Regulated Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
BARIUM	12/3/2019	0.0495	0.0495	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
FLUORIDE	12/3/2019	0.13	0.13	ppm	4	4	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
NITRATE	12/3/2019	0.25	0.25	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
NITRATE-NITRITE	12/3/2019	0.54	0.54	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
NITRITE	12/3/2019	0.29	0.29	ppm	1	1	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

Lead and Copper	Monitoring Period	90 <sup>th</sup> Percentile	Range (low/high)	Unit	AL	Sites Over AL	Typical Source
COPPER, FREE	2017 - 2019	0.0634	0.0172 - 0.0816	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD	2017 - 2019	1.1	0 - 1.1	ppb	15	0	Corrosion of household plumbing systems; Erosion of natural deposits

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 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>.

Chlorine/Chloramines Maximum Disinfection Level	MPA	MPA Units	RAA	RAA Units
12/01/2019 - 12/31/2019	2.4	MG/L	1.6	MG/L

Unresolved Deficiency Identified	Facility	Comments
08/23/2017	WATER SYSTEM	
08/23/2017	WATER SYSTEM	The PSD has not addressed the significant deficiencies noted in the last Sanitary Survey dated December 18, 2012.
08/23/2017	WELL 1 (SPRING)	Raw water is supplied to this system from an abandoned coal mine adjacent to the treatment facility. A superficial inspection of the rock wall enclosing the water source revealed some openings large enough for small animals to enter. The PSD should seal these openings as recommended by the WV Department of Environmental Protection and divert surface water away from this feature.
08/23/2017	TREATMENT PLANT	All of the water treatment facilities associated with this system are dilapidated and have exceeded their useful life span. The PSD should make every effort to expedite the construction of the regional water system near Maybeury in order to provide service to the customers currently served by this system.
08/23/2017	TREATMENT PLANT	This system does not provide adequate chlorine contact time to provide 4-log removal of viruses as required by the Revised Total Coliform Rule. This information was provided to the PSD in a letter dated November 25, 2009. The PSD must install an adequate chlorine contact tank.

Analyte	Facility	Highest Value	Unit of Measure	Month Occurred
No Detected Results were Found in the Calendar Year of 2019				

Radiological Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
GROSS ALPHA, EXCL. RADON & U	12/12/2019	0.69	0.69	pCi/L	15	0	Erosion of natural deposits

Secondary Contaminants-Non Health Based Contaminants-No Federal Maximum Contaminant Level (MCL) Established.	Collection Date	Highest Value	Range (low/high)	Unit	SMCL
CHLORIDE	12/3/2019	9.6	9.6	MG/L	250
CHLORINE	12/12/2019	2.5	2.5	MG/L	4
SODIUM	12/3/2019	74.8	74.8	MG/L	1000
SULFATE	12/3/2019	88.2	88.2	MG/L	250

During the 2019 calendar year, we had the below noted violation(s) of drinking water regulations.

Compliance Period	Analyte	Comments
7/1/2019 - 9/27/2019	CONSUMER CONFIDENCE RULE	CCR REPORT
1/1/2017 - 12/31/2019	ARSENIC TOTAL	MONITORING, ROUTINE MAJOR

There are no additional required health effects notices.

There are no additional required health effects violation notices.

Water System	Type	Category	Analyte	Compliance Period
No Violations Occurred in the Calendar Year of 2019				

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# MCDOWELL COUNTY PSD PREMIER WV3302411 Consumer Confidence Report – 2020 Covering Calendar Year – 2019

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Our drinking water is supplied from another water system through a Consecutive Connection (CC). To find out more about our drinking water sources and additional chemical sampling results, please contact our office at the number provided above. Your water comes from :

Source Name	Source Water Type
No other sources to display.	

Buyer Name	Seller Name
MCDOWELL COUNTY PSD PREMIER	WELCH CITY OF

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as those 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).

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**Testing Results for: MCDOWELL COUNTY PSD PREMIER**

Microbiological	Result	MCL	MCLG	Typical Source
No Detected Results were Found in the Calendar Year of 2019				

Regulated Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
No Detected Results were Found in the Calendar Year of 2019							

Disinfection Byproducts	Sample Point	Monitoring Period	Highest LRAA	Range (low/high)	Unit	MCL	MCLG	Typical Source
TOTAL HALOACETIC ACIDS (HAA5)	2 BOTTOM RD RIGHT FK, HALE RES.	2019	26	25.7 - 25.7	ppb	60	0	By-product of drinking water disinfection
TOTAL HALOACETIC ACIDS (HAA5)	88 BOOKER T STEPHENS WAY	2019	22	1.76 - 21	ppb	60	0	By-product of drinking water disinfection
TOTAL HALOACETIC ACIDS (HAA5)	INAC-PREMIER BOOSTER	2019	24	23.6 - 24	ppb	60	0	By-product of drinking water disinfection
TOTAL HALOACETIC ACIDS (HAA5)	MAXIMUM RESIDENCE TI	2019	29	29.1 - 29.1	ppb	60	0	By-product of drinking water disinfection
TTHM	2 BOTTOM RD RIGHT FK, HALE RES.	2019	73	72.9 - 72.9	ppb	80	0	By-product of drinking water chlorination
TTHM	88 BOOKER T STEPHENS WAY	2019	99	0 - 106	ppb	80	0	By-product of drinking water chlorination
TTHM	INAC-PREMIER BOOSTER	2019	78	73.1 - 83.4	ppb	80	0	By-product of drinking water chlorination
TTHM	MAXIMUM RESIDENCE TI	2019	60	59.7 - 59.7	ppb	80	0	By-product of drinking water chlorination

Lead and Copper	Monitoring Period	90 <sup>th</sup> Percentile	Range (low/high)	Unit	AL	Sites Over AL	Typical Source
COPPER, FREE	2019	0.096	0.0394 - 0.11	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD	2019	3.4	0.53 - 4.2	ppb	15	0	Corrosion of household plumbing systems; Erosion of natural deposits

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Chlorine/Chloramines Maximum Disinfection Level	MPA	MPA Units	RAA	RAA Units
04/01/2019 - 04/30/2019	3	MG/L	1.3	MG/L

Unresolved Deficiency Date Identified	Facility	Comments
02/09/2016	WATER SYSTEM	McDowell county PSD has not submitted any of the sampling plans required for the Revised Total Coliform Rule. These reports are overdue and must be submitted to the Beckley district office



		immediately to allow time for review and approval prior to rule implementation on April 1, 2016.
02/09/2016	WATER SYSTEM	The woody brush and overgrown tank site was noted in the last Sanitary Survey.
02/09/2016	WATER SYSTEM	The system received a Total Trihalomethane maximum contaminant level violation for the fourth quarter of 2015. Given that this PWS purchases finished water from the City of Welch, the PSD should work closely with the City to try to lower disinfection byproducts levels.
02/09/2016	WATER SYSTEM	The system has received violations for failure to collect or report Lead and Copper samples for the 2013, 2014 and 2015 monitoring periods. McDowell County PSD must consistently test for Lead and Copper in the drinking water In accordance with Federal Safe Drinking Water Regulations 40CFR141.86 and 40CFR141.90 as well as West Virginia Legislative Rule 34-3-10.

Analyte	Facility	Highest Value	Unit of Measure	Month Occurred
No Detected Results were Found in the Calendar Year of 2019				

Radiological Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
No Detected Results were Found in the Calendar Year of 2019							

During the 2019 calendar year, we had the below noted violation(s) of drinking water regulations.

Compliance Period	Analyte	Comments
7/1/2019 - 9/27/2019	CONSUMER CONFIDENCE RULE	CCR REPORT
12/30/2018 - 1/10/2019	TTHM	FAILURE SUBMIT OEL REPORT FOR TTHM
9/29/2019	TTHM	FAILURE SUBMIT OEL REPORT FOR TTHM
4/1/2019 - 6/30/2019	TTHM	MCL, AVERAGE
7/1/2019 - 9/30/2019	TTHM	MCL, AVERAGE
1/1/2019 - 3/31/2019	TTHM	MCL, LRAA
4/1/2019 - 6/30/2019	TTHM	MCL, LRAA
10/1/2019 - 12/31/2019	TTHM	MCL, LRAA
12/1/2018 - 2/28/2019	TRICHALOMETHANES	MONITORING, ROUTINE (DBP), MAJOR
12/1/2018 - 2/28/2019	HALOACETIC ACIDS	MONITORING, ROUTINE (DBP), MAJOR
3/1/2019 - 5/31/2019	HALOACETIC ACIDS	MONITORING, ROUTINE (DBP), MAJOR
3/1/2019 - 5/31/2019	TRICHALOMETHANES	MONITORING, ROUTINE (DBP), MAJOR
6/1/2019 - 8/31/2019	HALOACETIC ACIDS	MONITORING, ROUTINE (DBP), MAJOR
7/11/2019 - 9/27/2019	PUBLIC NOTICE	PUBLIC NOTICE RULE LINKED TO VIOLATION
9/22/2019	PUBLIC NOTICE	PUBLIC NOTICE RULE LINKED TO VIOLATION

**Additional Required Health Effects Language:**

Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

There are no additional required health effects violation notices. Some or all of our drinking water is supplied from another water system. The table below lists all of the drinking water contaminants, which were detected during the 2019 calendar year from the water systems that we purchase drinking water from.

Regulated Contaminants	Collection Date	Water System	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
ARSENIC	3/2/2017	WELCH CITY OF	1.1	1.1	ppb	10		Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
BARIUM	3/2/2017	WELCH CITY OF	0.257	0.257	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
FLUORIDE	3/2/2017	WELCH CITY OF	0.92	0.92	ppm	4	4	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
GROSS ALPHA, EXCL. RADON & U	1/15/2019	WELCH CITY OF	4.5	4.5	pCi/L	15	0	Erosion of natural deposits
NITRATE	1/15/2019	WELCH CITY OF	0.38	0.38	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
NITRATE-NITRITE	2/15/2018	WELCH CITY OF	0.34	0.34	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
RADIUM-228	1/15/2019	WELCH CITY OF	0.47	0.47	pCi/L		0	

Disinfection Byproducts	Monitoring Period	Water System	Highest RAA	Range	Unit	MCL	MCLG	Typical Source
No Detected Results were Found in the Calendar Year of 2019								

Secondary Contaminants	Collection Date	Water System	Highest Value	Range (low/high)	Unit	SMCL
SODIUM	3/2/2017	WELCH CITY OF	242	242	MG/L	1000
SULFATE	3/2/2017	WELCH CITY OF	2.5	2.5	MG/L	250

**Please Note: Because of sampling schedules, results may be older than 1 year.**

During the 2019 calendar year, the water systems that we purchase water from had the below noted violation(s) of drinking water regulations.

Water System	Type	Category	Analyte	Compliance Period
WELCH CITY OF	CCR REPORT	RPT	CONSUMER CONFIDENCE RULE	7/1/2019 - 7/12/2019
WELCH CITY OF	FAILURE TO COMPLETE OR SUBMIT MOR	MON	CHLORINE	1/1/2019 - 1/31/2019

There are no additional required health effects violation notices.

There are no additional required health effects notices.

Your CCR is available at [WWW://](http://WWW://)

. To receive a paper copy in the mail, please contact us at the phone number above.

# ASHLAND COMMUNITY

WV3302417

## Consumer Confidence Report – 2020

### Covering Calendar Year – 2019

This brochure is a snapshot of the quality of the water that we provided last year. Included are the details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards. We are committed to providing you with information because informed customers are our best allies. If you would like to observe the decision-making process that affect drinking water quality, please call MAVIS BREWSTER at 304-297-2622.

Your water comes from :

Source Name	Source Water Type
WELL 1-MINE DRIFT	Ground Water

Buyer Name	Seller Name
There are no additional purchases to display.	

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as those 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).

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 EPA's Safe Drinking Water Hotline (800-426-4791).

The sources of drinking water (both tap water and bottled water) included 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 sources water before we treat it include:

**Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, livestock operations and wildlife.

**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.

**Pesticides and herbicides**, which may come from a variety of sources such as storm water run-off, agriculture, and residential users.

**Radioactive contaminants**, which can be naturally occurring or the result of mining activity.

**Organic contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and also come from gas stations, urban storm water run-off, and septic systems.

In order to ensure that tap water is safe to drink, EPA prescribes regulation which limits the amount of certain contaminants in water provided by public water systems. We treat our water according to EPA's regulations. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Our water system has an estimated population of 70 and is required to test a minimum of 1 samples per month in accordance with the Total Coliform Rule for microbiological contaminants. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public.

#### Water Quality Data

The following tables list all of the drinking water contaminants which were detected during the 2019 calendar year. The presence of these contaminants does not necessarily indicate the water poses a health risk. Unless noted, the data presented in this table is from the testing done January 1- December 31, 2019. The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

#### Terms & Abbreviations

**Maximum Contaminant Level Goal (MCLG):** the "Goal" is the level of a contaminant in drinking water below which there is no known or expected risk to human health. MCLGs allow for a margin of safety.

**Maximum Contaminant Level (MCL):** the "Maximum Allowed" MCL 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.

**Secondary Maximum Contaminant Level (SMCL):** recommended level for a contaminant that is not regulated and has no MCL.

**Action Level (AL):** the concentration of a contaminant that, if exceeded, triggers treatment or other requirements.

**Treatment Technique (TT):** a required process intended to reduce levels of a contaminant in drinking water.

**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.

**Non-Detects (ND):** lab analysis indicates that the contaminant is not present.

**Parts per Million (ppm)** or milligrams per liter (mg/l)

**Parts per Billion (ppb)** or micrograms per liter (µg/l)

**Picocuries per Liter (pCi/L):** a measure of the radioactivity in water.

**Millirems per Year (mrem/yr):** measure of radiation absorbed by the body.

**Monitoring Period Average (MPA):** An average of sample results obtained during a defined time frame, common examples of monitoring periods are monthly, quarterly and yearly.

**Nephelometric Turbidity Unit (NTU):** a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person. Turbidity is not regulated for groundwater systems.

**Running Annual Average (RAA):** an average of sample results obtained over the most current 12 months and used to determine compliance with MCLs.

**Locational Running Annual Average (LRAA):** Average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

### Testing Results for: ASHLAND COMMUNITY

Microbiological	Result	MCL	MCLG	Typical Source
No Detected Results were Found in the Calendar Year of 2019				

Regulated Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
BARIUM	3/2/2016	0.0397	0.0397	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
NITRATE	6/19/2018	0.3	0.3	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
NITRATE-NITRITE	6/19/2018	0.38	0.38	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
NITRITE	6/19/2018	0.08	0.08	ppm	1	1	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

Disinfection Byproducts	Sample Point	Monitoring Period	Highest LRAA	Range (low/high)	Unit	MCL	MCLG	Typical Source
TOTAL HALOACETIC ACIDS (HAA5)	5663 CHEROKEE ROAD	2019	1	0.743 - 0.743	ppb	60	0	By-product of drinking water disinfection

Lead and Copper	Monitoring Period	90 <sup>th</sup> Percentile	Range (low/high)	Unit	AL	Sites Over AL	Typical Source
COPPER, FREE	2017 - 2019	0.237	0.0073 - 0.313	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD	2017 - 2019	3.7	0 - 6.8	ppb	15	0	Corrosion of household plumbing systems; Erosion of natural deposits

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 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>.

Chlorine/Chloramines Maximum Disinfection Level	MPA	MPA Units	RAA	RAA Units
06/01/2019 - 06/30/2019	3.5	MG/L	1.6	MG/L

Unresolved Deficiency Date Identified	Facility	Comments
02/07/2019	WATER SYSTEM	This public water system received violations for the monitoring period of Jan. 1, 2016 to Dec. 31, 2018 for either not collection Lead and Cooper samples or submitting the results late. The system should endeavor to submit all required samples in a timely manner to avoid future violation.
02/07/2019	WATER SYSTEM	This public water system received violations for the monitoring period of Jan. 1, 2014 to Dec. 31, 2016 for either not collecting VOC samples or submitting the results late. The system should endeavor to submit all required samples in a timely manner to avoid future violation.
02/07/2019	TREATMENT PLANT	
02/07/2019	WATER SYSTEM	The system has not addressed Significant Deficiencies as noted in past Sanitary Surveys.
02/07/2019	WATER SYSTEM	This public water system received violations for the monitoring period of July 1, 2017 to July 31, 2017 for either not collection TCR samples or submitting the results late. The system should endeavor to submit all required samples in a timely manner to avoid future violation.

Total Organic Carbon Lowest Month for Removal	Collection Date	Highest Value	Range	Unit	TT	Typical Source
CARBON, TOTAL	12/10/2019	1.39	1.39	MG/L	0	Naturally present in the environment

Analyte	Facility	Highest Value	Unit of Measure	Month Occurred
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No Detected Results were Found in the Calendar Year of 2019

Radiological Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
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No Detected Results were Found in the Calendar Year of 2019

Secondary Contaminants-Non Health Based Contaminants-No Federal Maximum Contaminant Level (MCL) Established.	Collection Date	Highest Value	Range (low/high)	Unit	SMCL
CARBON, TOTAL	12/10/2019	1.39	1.39	ppm	10000
CHLORINE	2/17/2016	0.5	0.5	MG/L	4
SODIUM	3/2/2016	26.9	26.9	MG/L	1000
SULFATE	3/2/2016	67.1	67.1	MG/L	250

During the 2019 calendar year, we had the below noted violation(s) of drinking water regulations.

Compliance Period	Analyte	Comments
7/1/2019 - 9/27/2019	CONSUMER CONFIDENCE RULE	CCR REPORT
7/9/2019	GROUNDWATER RULE	FAILURE ADDRESS DEFICIENCY (GWR)
2/1/2019 - 2/28/2019	CHLORINE	FAILURE TO COMPLETE OR SUBMIT MOR
5/1/2019 - 5/31/2019	CHLORINE	FAILURE TO COMPLETE OR SUBMIT MOR
4/9/2019	GROUNDWATER RULE	FAILURE TO CONSULT, GWR
9/1/2018 - 8/31/2019	TRIHALOMETHANES	MONITORING, ROUTINE (DBP), MAJOR
1/1/2014 - 12/31/2019	RADIONUCLIDES	MONITORING, ROUTINE MAJOR
1/1/2017 - 12/31/2019	ARSENIC TOTAL	MONITORING, ROUTINE MAJOR
1/1/2017 - 12/31/2019	INORGANICS C	MONITORING, ROUTINE MAJOR
1/1/2017 - 12/31/2019	VOLATILE ORGANICS	MONITORING, ROUTINE MAJOR
1/1/2017 - 12/31/2019	SYNTHETIC ORGANICS 2	MONITORING, ROUTINE MAJOR
1/1/2019 - 12/31/2019	NITRATE	MONITORING, ROUTINE MAJOR
5/1/2019 - 5/31/2019	CHLORINE	MONITORING, RTN/RPT MAJOR (GWR)
2/1/2019 - 2/28/2019	CHLORINE	MONITORING, RTN/RPT MINOR (GWR)
9/27/2019	PUBLIC NOTICE	PUBLIC NOTICE RULE LINKED TO VIOLATION

There are no additional required health effects notices.

There are no additional required health effects violation notices.

Water System	Type	Category	Analyte	Compliance Period
No Violations Occurred in the Calendar Year of 2019				

There are no additional required health effects violation notices.

There are no additional required health effects notices.

Your CCR is available at WWW:// . To receive a paper copy in the mail, please contact us at the phone number above.

# MCDOWELL COUNTY PSD KIMBALL WV3302431

## Consumer Confidence Report – 2020 Covering Calendar Year – 2019

This brochure is a snapshot of the quality of the water that we provided last year. Included are the details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards. We are committed to providing you with information because informed customers are our best allies. If you would like to observe the decision-making process that affect drinking water quality, please call MAVIS BREWSTER at 304-297-2622.

Your water comes from :

Source Name	Source Water Type
No other sources to display.	

Buyer Name	Seller Name
There are no additional purchases to display.	

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as those 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).

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 EPA's Safe Drinking Water Hotline (800-426-4791).

The sources of drinking water (both tap water and bottled water) included 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 sources water before we treat it include:

**Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, livestock operations and wildlife.

**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.

**Pesticides and herbicides**, which may come from a variety of sources such as storm water run-off, agriculture, and residential users.

**Radioactive contaminants**, which can be naturally occurring or the result of mining activity.

**Organic contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and also come from gas stations, urban storm water run-off, and septic systems.

In order to ensure that tap water is safe to drink, EPA prescribes regulation which limits the amount of certain contaminants in water provided by public water systems. We treat our water according to EPA's regulations. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Our water system has an estimated population of 605 and is required to test a minimum of 1 samples per month in accordance with the Total Coliform Rule for microbiological contaminants. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public.

### Water Quality Data

The following tables list all of the drinking water contaminants which were detected during the 2019 calendar year. The presence of these contaminants does not necessarily indicate the water poses a health risk. Unless noted, the data presented in this table is from the testing done January 1- December 31, 2019. The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

### Terms & Abbreviations

**Maximum Contaminant Level Goal (MCLG):** the "Goal" is the level of a contaminant in drinking water below which there is no known or expected risk to human health. MCLGs allow for a margin of safety.

**Maximum Contaminant Level (MCL):** the "Maximum Allowed" MCL 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.

**Secondary Maximum Contaminant Level (SMCL):** recommended level for a contaminant that is not regulated and has no MCL.

**Action Level (AL):** the concentration of a contaminant that, if exceeded, triggers treatment or other requirements.

**Treatment Technique (TT):** a required process intended to reduce levels of a contaminant in drinking water.

**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.

**Non-Detects (ND):** lab analysis indicates that the contaminant is not present.

**Parts per Million (ppm)** or milligrams per liter (mg/l)

**Parts per Billion (ppb)** or micrograms per liter (µg/l)

**Picocuries per Liter (pCi/L):** a measure of the radioactivity in water.

**Millirems per Year (mrem/yr):** measure of radiation absorbed by the body.

**Monitoring Period Average (MPA):** An average of sample results obtained during a defined time frame, common examples of monitoring periods are monthly, quarterly and yearly.

**Nephelometric Turbidity Unit (NTU):** a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person. Turbidity is not regulated for groundwater systems.

**Running Annual Average (RAA):** an average of sample results obtained over the most current 12 months and used to determine compliance with MCLs.

**Locational Running Annual Average (LRAA):** Average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

**Testing Results for: MCDOWELL COUNTY PSD KIMBALL**

Microbiological	Result	MCL	MCLG	Typical Source
No Detected Results were Found in the Calendar Year of 2019				

Regulated Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
ANTIMONY, TOTAL	5/25/2016	0.4	0.4	ppb	6	6	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
BARIUM	5/25/2016	0.0551	0.0551	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
FLUORIDE	5/25/2016	0.11	0.11	ppm	4	4	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
NITRATE	6/19/2018	0.17	0.17	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
NITRATE-NITRITE	6/19/2018	0.17	0.17	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
SELENIUM	5/25/2016	3.1	3.1	ppb	50	50	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines

Disinfection Byproducts	Sample Point	Monitoring Period	Highest LRAA	Range (low/high)	Unit	MCL	MCLG	Typical Source
TOTAL HALOACETIC ACIDS (HAA5)	1570 CARSWELL HOLLOW RD	2019	2	1.7 - 1.7	ppb	60	0	By-product of drinking water disinfection

Lead and Copper	Monitoring Period	90 <sup>th</sup> Percentile	Range (low/high)	Unit	AL	Sites Over AL	Typical Source
COPPER, FREE	2017 - 2019	0.0341	0.0079 - 0.0364	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD	2017 - 2019	0.5	0 - 0.9	ppb	15	0	Corrosion of household plumbing systems; Erosion of natural deposits

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 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>.

Chlorine/Chloramines Maximum Disinfection Level	MPA	MPA Units	RAA	RAA Units
05/01/2019 - 05/31/2019	2.8	MG/L	2.1	MG/L

Unresolved Deficiency Identified	Date	Facility	Comments
08/23/2017		WATER SYSTEM	The PSD has not addressed the significant deficiencies noted in the past two Sanitary Surveys. These deficiencies noted poor plant condition, lack of fencing, inaccessible tank site as well as other items.
08/23/2017		TREATMENT PLANT	This water treatment facility is dilapidated and has reached the end of its useful service life. The PSD must make every effort to expedite phase 2 of the Elkhorn water extension project in order to take this treatment plant out of service.
08/23/2017		TREATMENT PLANT	On the day this system was inspected the water line feeding the chlorine educator was broken and leaking within the treatment plant. The chlorine system must be regularly monitored and repaired to insure continuous disinfection of the distributed water.
08/23/2017		STORAGE 2	This tank was again inaccessible as noted in the last Sanitary Survey. The operator noted that the tank is in poor repair and likely not holding water. If so, this tank must be replaced immediately as it poses a public health threat.

Analyte	Facility	Highest Value	Unit of Measure	Month Occurred
No Detected Results were Found in the Calendar Year of 2019				

Radiological Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
No Detected Results were Found in the Calendar Year of 2019							

Secondary Contaminants-Non Health Based Contaminants-No Federal Maximum Contaminant Level (MCL) Established.	Collection Date	Highest Value	Range (low/high)	Unit	SMCL
NICKEL	5/25/2016	0.0034	0.0034	MG/L	0.1
SODIUM	5/25/2016	64.6	64.6	MG/L	1000
SULFATE	5/25/2016	88.1	88.1	MG/L	250

During the 2019 calendar year, we had the below noted violation(s) of drinking water regulations.

Compliance Period	Analyte	Comments
7/1/2019 - 9/27/2019	CONSUMER CONFIDENCE RULE	CCR REPORT
1/1/2014 - 12/31/2019	RADIONUCLIDES	MONITORING, ROUTINE MAJOR
1/1/2017 - 12/31/2019	ARSENIC TOTAL	MONITORING, ROUTINE MAJOR
1/1/2017 - 12/31/2019	INORGANICS C	MONITORING, ROUTINE MAJOR
1/1/2019 - 12/31/2019	NITRATE	MONITORING, ROUTINE MAJOR

There are no additional required health effects notices.

There are no additional required health effects violation notices.

Water System	Type	Category	Analyte	Compliance Period
No Violations Occurred in the Calendar Year of 2019				

There are no additional required health effects violation notices.

There are no additional required health effects notices.

Your CCR is available at [WWW://](#) . To receive a paper copy in the mail, please contact us at the phone number above.



# MCDOWELL COUNTY PSD BARTLEY WV3302434 Consumer Confidence Report – 2020 Covering Calendar Year – 2019

This brochure is a snapshot of the quality of the water that we provided last year. Included are the details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards. We are committed to providing you with information because informed customers are our best allies. If you would like to observe the decision-making process that affect drinking water quality, please call MAVIS BREWSTER at 304-297-2622.

Your water comes from :

Source Name	Source Water Type
WELL - MINE	Ground Water under the Influence of Surface Water

Buyer Name	Seller Name
There are no additional purchases to display.	

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as those 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).

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 EPA's Safe Drinking Water Hotline (800-426-4791).

The sources of drinking water (both tap water and bottled water) included 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 sources water before we treat it include:

**Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, livestock operations and wildlife.

**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.

**Pesticides and herbicides**, which may come from a variety of sources such as storm water run-off, agriculture, and residential users.

**Radioactive contaminants**, which can be naturally occurring or the result of mining activity.

**Organic contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and also come from gas stations, urban storm water run-off, and septic systems.

In order to ensure that tap water is safe to drink, EPA prescribes regulation which limits the amount of certain contaminants in water provided by public water systems. We treat our water according to EPA's regulations. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Our water system has an estimated population of 1632 and is required to test a minimum of 2 samples per month in accordance with the Total Coliform Rule for microbiological contaminants. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public.

## Water Quality Data

The following tables list all of the drinking water contaminants which were detected during the 2019 calendar year. The presence of these contaminants does not necessarily indicate the water poses a health risk. Unless noted, the data presented in this table is from the testing done January 1- December 31, 2019. The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

## Terms & Abbreviations

**Maximum Contaminant Level Goal (MCLG):** the "Goal" is the level of a contaminant in drinking water below which there is no known or expected risk to human health. MCLGs allow for a margin of safety.

**Maximum Contaminant Level (MCL):** the "Maximum Allowed" MCL 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.

**Secondary Maximum Contaminant Level (SMCL):** recommended level for a contaminant that is not regulated and has no MCL.

**Action Level (AL):** the concentration of a contaminant that, if exceeded, triggers treatment or other requirements.

**Treatment Technique (TT):** a required process intended to reduce levels of a contaminant in drinking water.

**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.

**Non-Detects (ND):** lab analysis indicates that the contaminant is not present.

**Parts per Million (ppm)** or milligrams per liter (mg/l)

**Parts per Billion (ppb)** or micrograms per liter (µg/l)

**Picocuries per Liter (pCi/L):** a measure of the radioactivity in water.

**Millirems per Year (mrem/yr):** measure of radiation absorbed by the body.

**Monitoring Period Average (MPA):** An average of sample results obtained during a defined time frame, common examples of monitoring periods are monthly, quarterly and yearly.

**Nephelometric Turbidity Unit (NTU):** a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person. Turbidity is not regulated for groundwater systems.

**Running Annual Average (RAA):** an average of sample results obtained over the most current 12 months and used to determine compliance with MCLs.

**Locational Running Annual Average (LRAA):** Average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

**Testing Results for: MCDOWELL COUNTY PSD BARTLEY**

Microbiological	Result	MCL	MCLG	Typical Source
No Detected Results were Found in the Calendar Year of 2019				

Regulated Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
ARSENIC	4/16/2019	1.5	1.5	ppb	10		Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
BARIUM	4/16/2019	0.237	0.237	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
FLUORIDE	4/16/2019	0.93	0.93	ppm	4	4	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
NITRATE	4/16/2019	0.07	0.07	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
NITRATE-NITRITE	4/16/2019	0.55	0.55	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
NITRITE	4/16/2019	0.48	0.48	ppm	1	1	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

Disinfection Byproducts	Sample Point	Monitoring Period	Highest LRAA	Range (low/high)	Unit	MCL	MCLG	Typical Source
TOTAL HALOACETIC ACIDS (HAA5)	1786 ROCKET BOYS DRIVE	2019	30	15.4 - 44.1	ppb	60	0	By-product of drinking water disinfection
TOTAL HALOACETIC ACIDS (HAA5)	747 RAYSALL HOLLOW RD	2019	14	13.6 - 13.6	ppb	60	0	By-product of drinking water disinfection
TOTAL HALOACETIC ACIDS (HAA5)	BARTLEY PO - NO. 5 HOLLOW	2019	16	15.6 - 15.6	ppb	60	0	By-product of drinking water disinfection
TTHM	747 RAYSALL HOLLOW RD	2019	45	16 - 55.2	ppb	80	0	By-product of drinking water chlorination
TTHM	BARTLEY PO - NO. 5 HOLLOW	2019	45	45.2 - 45.2	ppb	80	0	By-product of drinking water chlorination

Lead and Copper	Monitoring Period	90 <sup>th</sup> Percentile	Range (low/high)	Unit	AL	Sites Over AL	Typical Source
COPPER, FREE	2017 - 2019	0.223	0.0103 - 0.305	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD	2017 - 2019	0.55	0 - 0.7	ppb	15	0	Corrosion of household plumbing systems; Erosion of natural deposits

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 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>.

Chlorine/Chloramines Maximum Disinfection Level	MPA	MPA Units	RAA	RAA Units
02/01/2019 - 02/28/2019	3	MG/L	2.0	MG/L

Unresolved Deficiency Date Identified	Facility	Comments

07/15/2019	WATER SYSTEM	This system has undergone numerous extensions that justify reevaluating the disinfection byproduct sampling plan. The system should sample at the maximum residence location that is likely in the Paynesville area.
07/15/2019	TREATMENT PLANT	The chlorine leak detector was not functional on the day the treatment plant was inspected.
07/15/2019	BARTLEY TANK	The tank site is poorly drained and most of the tank site is saturated which could lead to foundation failure. Better site drainage must be installed to prevent future tank damage and or failure.
07/15/2019	WATER SYSTEM	The PSD has not addressed two of the Significant Deficiencies noted in the last Sanitary Survey. The Bartley tank site still has inadequate drainage and the surrounding ground is saturated, and the chlorine leak detector is still inoperative.

Total Organic Carbon Lowest Month for Removal	Collection Date	Highest Value	Range	Unit	TT	Typical Source
<b>CARBON, TOTAL</b>	<b>1/22/2019</b>	<b>1.49</b>	<b>0.9 - 1.49</b>	<b>MG/L</b>	<b>0</b>	<b>Naturally present in the environment</b>

Analyte	Facility	Highest Value	Unit of Measure	Month Occurred
TURBIDITY	TREATMENT PLANT	0.17	NTU	DEC 2019

Radiological Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
No Detected Results were Found in the Calendar Year of 2019							

Secondary Contaminants-Non Health Based Contaminants-No Federal Maximum Contaminant Level (MCL) Established.	Collection Date	Highest Value	Range (low/high)	Unit	SMCL
CARBON, TOTAL	1/22/2019	1.49	0.9 - 1.49	ppm	10000
SODIUM	4/16/2019	120	120	MG/L	1000
SULFATE	4/16/2019	67.8	67.8	MG/L	250

During the 2019 calendar year, we had the below noted violation(s) of drinking water regulations.

Compliance Period	Analyte	Comments
7/1/2019 - 9/27/2019	CONSUMER CONFIDENCE RULE	CCR REPORT
6/1/2019 - 8/31/2019	HALOACETIC ACIDS	MONITORING, ROUTINE (DBP), MAJOR
9/1/2019 - 11/30/2019	TRICHALOMETHANES	MONITORING, ROUTINE (DBP), MAJOR
9/1/2019 - 11/30/2019	HALOACETIC ACIDS	MONITORING, ROUTINE (DBP), MAJOR
1/1/2014 - 12/31/2019	RADIONUCLIDES	MONITORING, ROUTINE MAJOR
1/1/2017 - 12/31/2019	SYNTHETIC ORGANICS 2	MONITORING, ROUTINE MAJOR
1/1/2019 - 12/31/2019	NITRATE	MONITORING, ROUTINE MAJOR
1/1/2019 - 12/31/2019	VOLATILE ORGANICS	MONITORING, ROUTINE MAJOR

There are no additional required health effects notices.

There are no additional required health effects violation notices.

Water System	Type	Category	Analyte	Compliance Period
No Violations Occurred in the Calendar Year of 2019				

There are no additional required health effects violation notices.

There are no additional required health effects notices.

Your CCR is available at WWW://

. To receive a paper copy in the mail, please contact us at the phone number above.

# MCDOWELL COUNTY PSD BERWIND

WV3302435

## Consumer Confidence Report – 2020

Covering Calendar Year – 2019

This brochure is a snapshot of the quality of the water that we provided last year. Included are the details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards. We are committed to providing you with information because informed customers are our best allies. If you would like to observe the decision-making process that affect drinking water quality, please call MAVIS BREWSTER at 304-297-2622.

Your water comes from :

Source Name	Source Water Type
BERWIND WELL	Ground Water under the Influence of Surface Water

Buyer Name	Seller Name
There are no additional purchases to display.	

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as those 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).

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 EPA's Safe Drinking Water Hotline (800-426-4791).

The sources of drinking water (both tap water and bottled water) included 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 sources water before we treat it include:

Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, livestock operations and wildlife.

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.

Pesticides and herbicides, which may come from a variety of sources such as storm water run-off, agriculture, and residential users.

Radioactive contaminants, which can be naturally occurring or the result of mining activity.

Organic contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and also come from gas stations, urban storm water run-off, and septic systems.

In order to ensure that tap water is safe to drink, EPA prescribes regulation which limits the amount of certain contaminants in water provided by public water systems. We treat our water according to EPA's regulations. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Our water system has an estimated population of 863 and is required to test a minimum of 1 samples per month in accordance with the Total Coliform Rule for microbiological contaminants. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public.

### Water Quality Data

The following tables list all of the drinking water contaminants which were detected during the 2019 calendar year. The presence of these contaminants does not necessarily indicate the water poses a health risk. Unless noted, the data presented in this table is from the testing done January 1- December 31, 2019. The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

### Terms & Abbreviations

**Maximum Contaminant Level Goal (MCLG):** the "Goal" is the level of a contaminant in drinking water below which there is no known or expected risk to human health. MCLGs allow for a margin of safety.

**Maximum Contaminant Level (MCL):** the "Maximum Allowed" MCL 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.

**Secondary Maximum Contaminant Level (SMCL):** recommended level for a contaminant that is not regulated and has no MCL.

**Action Level (AL):** the concentration of a contaminant that, if exceeded, triggers treatment or other requirements.

**Treatment Technique (TT):** a required process intended to reduce levels of a contaminant in drinking water.

**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.

**Non-Detects (ND):** lab analysis indicates that the contaminant is not present.

**Parts per Million (ppm)** or milligrams per liter (mg/l)

**Parts per Billion (ppb)** or micrograms per liter (µg/l)

**Picocuries per Liter (pCi/L):** a measure of the radioactivity in water.

**Millirems per Year (mrem/yr):** measure of radiation absorbed by the body.

**Monitoring Period Average (MPA):** An average of sample results obtained during a defined time frame, common examples of monitoring periods are monthly, quarterly and yearly.

**Nephelometric Turbidity Unit (NTU):** a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person. Turbidity is not regulated for groundwater systems.

**Running Annual Average (RAA):** an average of sample results obtained over the most current 12 months and used to determine compliance with MCLs.

**Locational Running Annual Average (LRAA):** Average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

**Testing Results for: MCDOWELL COUNTY PSD BERWIND**

Microbiological	Result	MCL	MCLG	Typical Source
No Detected Results were Found in the Calendar Year of 2019				

Regulated Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
BARIUM	10/15/2019	0.0717	0.0717	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
FLUORIDE	10/15/2019	0.72	0.72	ppm	4	4	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
NITRATE	10/15/2019	0.05	0.05	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
NITRATE-NITRITE	10/15/2019	0.16	0.16	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
NITRITE	10/15/2019	0.11	0.11	ppm	1	1	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

Disinfection Byproducts	Sample Point	Monitoring Period	Highest LRAA	Range (low/high)	Unit	MCL	MCL G	Typical Source
TOTAL HALOACETIC ACIDS (HAA5)	9095 ROCKET BOYS DRIVE	2019	34	20.2 - 38.4	ppb	60	0	By-product of drinking water disinfection
TTHM	35 PALM STREET	2019	51	17.5 - 65.9	ppb	80	0	By-product of drinking water chlorination

Lead and Copper	Monitoring Period	90 <sup>th</sup> Percentile	Range (low/high)	Unit	AL	Sites Over AL	Typical Source
COPPER, FREE	2017 - 2019	0.0931	0.0064 - 0.384	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD	2017 - 2019	0.7	0 - 3.4	ppb	15	0	Corrosion of household plumbing systems; Erosion of natural deposits

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 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>.

Chlorine/Chloramines Maximum Disinfection Level	MPA	MPA Units	RAA	RAA Units
09/01/2019 - 09/30/2019	2.8	MG/L	2.3	MG/L

Unresolved Deficiency Date Identified	Facility	Comments
08/19/2016	TREATMENT PLANT-BERWIND	Given that most of the piping is beneath the concrete plant floor it is unclear exactly the route the chlorine process water follows. However, it appears as though the prechlorine solution feeding the exterior sedimentation tank is directly plumbed to the high service pump discharge. Given the free water surface in this tank is higher than the clearwell, a potential cross connection exists between the sedimentation basin and the clearwell. An approved backflow device must be installed on the supply water pipe to prevent this potential backflow.
08/19/2019	TREATMENT PLANT-BERWIND	As noted in past Sanitary Surveys, the media within the filter units has likely never been evaluated for consistency with the required size and uniformity specifications. Any future repairs to the filter units must include installation of new filter media.
08/19/2019	WATER SYSTEM	While the PSD has addressed most of the significant deficiencies noted in the last Sanitary Survey, the excessive rust and corrosion of the filter units is still an outstanding issue. In accordance with responses from the PSD dated October 17, 2016 and November 20, 2017, these deficiencies will be addressed in some future project when funding is available. Given the scope of the work needed

		to make these repairs, it is not likely the PSD could complete any of the required repairs with staff on hand.
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Total Organic Carbon Lowest Month for Removal	Collection Date	Highest Value	Range	Unit	TT	Typical Source
CARBON, TOTAL	9/11/2019	1.37	0.68 - 1.37	MG/L	0	Naturally present in the environment

Analyte	Facility	Highest Value	Unit of Measure	Month Occurred
TURBIDITY	TREATMENT PLANT-BERWIND	0.20	NTU	JAN 2019

Radiological Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
GROSS ALPHA, EXCL. RADON & U	10/15/2019	0.454	0.454	pCi/L	15	0	Erosion of natural deposits

Secondary Contaminants-Non Health Based Contaminants-No Federal Maximum Contaminant Level (MCL) Established.	Collection Date	Highest Value	Range (low/high)	Unit	SMCL
CARBON, TOTAL	9/11/2019	1.37	0.68 - 1.37	ppm	10000
CHLORIDE	10/15/2019	11.5	11.5	MG/L	250
SODIUM	10/15/2019	54.1	54.1	MG/L	1000
SULFATE	10/15/2019	94.2	94.2	MG/L	250

During the 2019 calendar year, we had the below noted violation(s) of drinking water regulations.

Compliance Period	Analyte	Comments
7/1/2019 - 9/27/2019	CONSUMER CONFIDENCE RULE	CCR REPORT
4/1/2019 - 6/30/2019	CARBON, TOTAL	MONITORING, ROUTINE (DBP), MAJOR
4/1/2019 - 6/30/2019	ALKALINITY, TOTAL	MONITORING, ROUTINE (DBP), MAJOR
4/1/2019 - 6/30/2019	CARBON, TOTAL	MONITORING, ROUTINE (DBP), MAJOR
9/1/2019 - 11/30/2019	TRICHALOMETHANES	MONITORING, ROUTINE (DBP), MAJOR
9/1/2019 - 11/30/2019	HALOACETIC ACIDS	MONITORING, ROUTINE (DBP), MAJOR
10/1/2019 - 12/31/2019	CARBON, TOTAL	MONITORING, ROUTINE (DBP), MAJOR
10/1/2019 - 12/31/2019	ALKALINITY, TOTAL	MONITORING, ROUTINE (DBP), MAJOR
1/1/2019 - 1/31/2019	TURBIDITY	MONITORING, ROUTINE (IESWTR/LT1), MINOR
1/1/2019 - 12/31/2019	MERCURY	MONITORING, ROUTINE MAJOR

There are no additional required health effects notices.

There are no additional required health effects violation notices.

Water System	Type	Category	Analyte	Compliance Period
No Violations Occurred in the Calendar Year of 2019				

There are no additional required health effects violation notices.

There are no additional required health effects notices.

Your CCR is available at WWW:// . To receive a paper copy in the mail, please contact us at the phone number above.

# MCDOWELL COUNTY PSD COALWOOD

WV3302439

## Consumer Confidence Report – 2020

### Covering Calendar Year – 2019

This brochure is a snapshot of the quality of the water that we provided last year. Included are the details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards. We are committed to providing you with information because informed customers are our best allies. If you would like to observe the decision-making process that affect drinking water quality, please call MAVIS BREWSTER at 304-297-2622.

Your water comes from :

Source Name	Source Water Type
WELL NO. 2	Ground Water
WELL-MINE	Ground Water

Buyer Name	Seller Name
There are no additional purchases to display.	

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as those 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).

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The sources of drinking water (both tap water and bottled water) included 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.

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**Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, livestock operations and wildlife.

**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.

**Pesticides and herbicides**, which may come from a variety of sources such as storm water run-off, agriculture, and residential users.

**Radioactive contaminants**, which can be naturally occurring or the result of mining activity.

**Organic contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and also come from gas stations, urban storm water run-off, and septic systems.

In order to ensure that tap water is safe to drink, EPA prescribes regulation which limits the amount of certain contaminants in water provided by public water systems. We treat our water according to EPA's regulations. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Our water system has an estimated population of 1008 and is required to test a minimum of 2 samples per month in accordance with the Total Coliform Rule for microbiological contaminants. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public.

#### Water Quality Data

The following tables list all of the drinking water contaminants which were detected during the 2019 calendar year. The presence of these contaminants does not necessarily indicate the water poses a health risk. Unless noted, the data presented in this table is from the testing done January 1- December 31, 2019. The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

#### Terms & Abbreviations

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**Maximum Contaminant Level (MCL):** the "Maximum Allowed" MCL 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.

**Secondary Maximum Contaminant Level (SMCL):** recommended level for a contaminant that is not regulated and has no MCL.

**Action Level (AL):** the concentration of a contaminant that, if exceeded, triggers treatment or other requirements.

**Treatment Technique (TT):** a required process intended to reduce levels of a contaminant in drinking water.

**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.

**Non-Detects (ND):** lab analysis indicates that the contaminant is not present.

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**Parts per Billion (ppb)** or micrograms per liter (µg/l)

**Picocuries per Liter (pCi/L):** a measure of the radioactivity in water.

**Millirems per Year (mrem/yr):** measure of radiation absorbed by the body.

**Monitoring Period Average (MPA):** An average of sample results obtained during a defined time frame, common examples of monitoring periods are monthly, quarterly and yearly.

**Nephelometric Turbidity Unit (NTU):** a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person. Turbidity is not regulated for groundwater systems.

**Running Annual Average (RAA):** an average of sample results obtained over the most current 12 months and used to determine compliance with MCLs.

**Locational Running Annual Average (LRAA):** Average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

**Testing Results for: MCDOWELL COUNTY PSD COALWOOD**

Microbiological	Result	MCL	MCLG	Typical Source
No Detected Results were Found in the Calendar Year of 2019				

Regulated Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
BARIUM	5/20/2019	0.706	0.706	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
FLUORIDE	5/20/2019	0.47	0.47	ppm	4	4	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
MERCURY	5/20/2019	0.1	0.1	ppb	2	2	Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills; Runoff from cropland

Disinfection Byproducts	Sample Point	Monitoring Period	Highest LRAA	Range (low/high)	Unit	MCL	MCLG	Typical Source
TOTAL HALOACETIC ACIDS (HAA5)	1185 SANDYHUFF RD	2019	15	4.96 - 18.1	ppb	60	0	By-product of drinking water disinfection
TOTAL HALOACETIC ACIDS (HAA5)	5351 COAL HERITAGE ROAD	2019	13	4.87 - 4.87	ppb	60	0	By-product of drinking water disinfection
TOTAL HALOACETIC ACIDS (HAA5)	MRT #4 GOING TO IAGER	2019	19	13.3 - 18.8	ppb	60	0	By-product of drinking water disinfection
TTHM	1185 SANDYHUFF RD	2019	19	6.9 - 15.6	ppb	80	0	By-product of drinking water chlorination
TTHM	5351 COAL HERITAGE ROAD	2019	20	7 - 7	ppb	80	0	By-product of drinking water chlorination
TTHM	MRT #4 GOING TO IAGER	2019	16	15.4 - 16.4	ppb	80	0	By-product of drinking water chlorination

Lead and Copper	Monitoring Period	90 <sup>th</sup> Percentile	Range (low/high)	Unit	AL	Sites Over AL	Typical Source
COPPER, FREE	2017 - 2019	0.263	0.0053 - 0.336	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD	2017 - 2019	0.65	0 - 0.79	ppb	15	0	Corrosion of household plumbing systems; Erosion of natural deposits

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 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>.

Chlorine/Chloramines Maximum Disinfection Level	MPA	MPA Units	RAA	RAA Units
02/01/2019 - 02/28/2019	3	MG/L	2.2	MG/L

Unresolved Deficiency Date Identified	Facility	Comments
10/17/2019	TREATMENT PLANT	The chlorine feed and storage area does not have a leak detector. Given that this treatment plant is a public area that conducts meetings, houses administrative staff, receives in person payment from customers, etc., it is imperative that proper chlorine leak detections equipment is installed as



		soon as possible. Additionally, ventilation and exhaust fan equipment should be checked daily to ensure the safety of PSD staff and the general public,
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Analyte	Facility	Highest Value	Unit of Measure	Month Occurred
No Detected Results were Found in the Calendar Year of 2019				

Radiological Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
GROSS ALPHA, EXCL. RADON & U	10/15/2019	1.11	1.11	pCi/L	15	0	Erosion of natural deposits

Secondary Contaminants-Non Health Based Contaminants-No Federal Maximum Contaminant Level (MCL) Established.	Collection Date	Highest Value	Range (low/high)	Unit	SMCL
SODIUM	5/20/2019	49.2	49.2	MG/L	1000
SULFATE	5/20/2019	5.54	5.54	MG/L	250

During the 2019 calendar year, we had the below noted violation(s) of drinking water regulations.

Compliance Period	Analyte	Comments
7/1/2019 - 9/27/2019	CONSUMER CONFIDENCE RULE	CCR REPORT
12/1/2018 - 2/28/2019	TRICHALOMETHANES	MONITORING, ROUTINE (DBP), MAJOR
12/1/2018 - 2/28/2019	HALOACETIC ACIDS	MONITORING, ROUTINE (DBP), MAJOR
3/1/2019 - 5/31/2019	TRICHALOMETHANES	MONITORING, ROUTINE (DBP), MAJOR
3/1/2019 - 5/31/2019	HALOACETIC ACIDS	MONITORING, ROUTINE (DBP), MAJOR
9/1/2019 - 11/30/2019	TRICHALOMETHANES	MONITORING, ROUTINE (DBP), MAJOR
9/1/2019 - 11/30/2019	HALOACETIC ACIDS	MONITORING, ROUTINE (DBP), MAJOR

There are no additional required health effects notices.

There are no additional required health effects violation notices.

Water System	Type	Category	Analyte	Compliance Period
No Violations Occurred in the Calendar Year of 2019				

There are no additional required health effects violation notices.

There are no additional required health effects notices.

Your CCR is available at [WWW://](http://WWW://) . To receive a paper copy in the mail, please contact us at the phone number above.

# MCDOWELL COUNTY PSD HAVACO WV3302440 Consumer Confidence Report – 2020 Covering Calendar Year – 2019

This brochure is a snapshot of the quality of the water that we provided last year. Included are the details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards. We are committed to providing you with information because informed customers are our best allies. If you would like to observe the decision-making process that affect drinking water quality, please call MAVIS BREWSTER at 304-297-2622.

Our drinking water is supplied from another water system through a Consecutive Connection (CC). To find out more about our drinking water sources and additional chemical sampling results, please contact our office at the number provided above. Your water comes from :

Source Name	Source Water Type
No other sources to display.	

Buyer Name	Seller Name
MCDOWELL COUNTY PSD HAVACO	WELCH CITY OF

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as those 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).

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 EPA's Safe Drinking Water Hotline (800-426-4791).

The sources of drinking water (both tap water and bottled water) included 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 sources water before we treat it include:  
Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, livestock operations and wildlife.  
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.  
Pesticides and herbicides, which may come from a variety of sources such as storm water run-off, agriculture, and residential users.  
Radioactive contaminants, which can be naturally occurring or the result of mining activity.  
Organic contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and also come from gas stations, urban storm water run-off, and septic systems.

In order to ensure that tap water is safe to drink, EPA prescribes regulation which limits the amount of certain contaminants in water provided by public water systems. We treat our water according to EPA's regulations. Food and Drug

Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Our water system has an estimated population of 370 and is required to test a minimum of 1 samples per month in accordance with the Total Coliform Rule for microbiological contaminants. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public.

## Water Quality Data

The following tables list all of the drinking water contaminants which were detected during the 2019 calendar year. The presence of these contaminants does not necessarily indicate the water poses a health risk. Unless noted, the data presented in this table is from the testing done January 1- December 31, 2019. The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

## Terms & Abbreviations

**Maximum Contaminant Level Goal (MCLG):** the "Goal" is the level of a contaminant in drinking water below which there is no known or expected risk to human health. MCLGs allow for a margin of safety.

**Maximum Contaminant Level (MCL):** the "Maximum Allowed" MCL 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.

**Secondary Maximum Contaminant Level (SMCL):** recommended level for a contaminant that is not regulated and has no MCL.

**Action Level (AL):** the concentration of a contaminant that, if exceeded, triggers treatment or other requirements.

**Treatment Technique (TT):** a required process intended to reduce levels of a contaminant in drinking water.

**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.

**Non-Detects (ND):** lab analysis indicates that the contaminant is not present.

**Parts per Million (ppm)** or milligrams per liter (mg/l)

**Parts per Billion (ppb)** or micrograms per liter (µg/l)

**Picocuries per Liter (pCi/L):** a measure of the radioactivity in water.

**Millirems per Year (mrem/yr):** measure of radiation absorbed by the body.

**Monitoring Period Average (MPA):** An average of sample results obtained during a defined time frame, common examples of monitoring periods are monthly, quarterly and yearly.

**Nephelometric Turbidity Unit (NTU):** a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person. Turbidity is not regulated for groundwater systems.

**Running Annual Average (RAA):** an average of sample results obtained over the most current 12 months and used to determine compliance with MCLs.

**Locational Running Annual Average (LRAA):** Average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

**Testing Results for: MCDOWELL COUNTY PSD HAVACO**

Microbiological	Result	MCL	MCLG	Typical Source
No Detected Results were Found in the Calendar Year of 2019				

Regulated Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
No Detected Results were Found in the Calendar Year of 2019							

Disinfection Byproducts	Sample Point	Monitoring Period	Highest LRAA	Range (low/high)	Unit	MCL	MCLG	Typical Source
TOTAL HALOACETIC ACIDS (HAA5)	100 HEADQUARTERS LANE	2019	21	2.11 - 15.6	ppb	60	0	By-product of drinking water disinfection
TTHM	100 HEADQUARTERS LANE	2019	94	0 - 83.3	ppb	80	0	By-product of drinking water chlorination

Lead and Copper	Monitoring Period	90 <sup>th</sup> Percentile	Range (low/high)	Unit	AL	Sites Over AL	Typical Source
COPPER, FREE	2019	0.0524	0.0208 - 0.0554	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD	2019	0.9	0 - 1.3	ppb	15	0	Corrosion of household plumbing systems; Erosion of natural deposits

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 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>.

Chlorine/Chloramines Maximum Disinfection Level	MPA	MPA Units	RAA	RAA Units
01/01/2019 - 01/31/2019	3.5	MG/L	1.5	MG/L

Unresolved Deficiency Identified	Date	Facility	Comments
02/09/2016		WATER SYSTEM	The system has received violations for failure to collect or report Lead and Copper samples for the 2013, 2014 and 2015 monitoring periods. McDowell County PSD must consistently test for Lead and Copper in the drinking water in accordance with Federal Safe Drinking Water Regulations 40CFR141.86 and 40CFR141.90 as well as West Virginia Legislative Rule 34-3-10.

Analyte	Facility	Highest Value	Unit of Measure	Month Occurred
No Detected Results were Found in the Calendar Year of 2019				

Radiological Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
No Detected Results were Found in the Calendar Year of 2019							

During the 2019 calendar year, we had the below noted violation(s) of drinking water regulations.

Compliance Period	Analyte	Comments
7/1/2019 - 9/27/2019	CONSUMER CONFIDENCE RULE	CCR REPORT
12/30/2018 - 4/23/2019	TTHM	FAILURE SUBMIT OEL REPORT FOR TTHM
4/1/2019 - 4/23/2019	TTHM	FAILURE SUBMIT OEL REPORT FOR TTHM

10/1/2019 - 12/31/2019	TTHM	MCL, LRAA
12/1/2018 - 2/28/2019	TRICHALOMETHANES	MONITORING, ROUTINE (DBP), MAJOR
12/1/2018 - 2/28/2019	HALOACETIC ACIDS	MONITORING, ROUTINE (DBP), MAJOR
3/1/2019 - 5/31/2019	TRICHALOMETHANES	MONITORING, ROUTINE (DBP), MAJOR
3/1/2019 - 5/31/2019	HALOACETIC ACIDS	MONITORING, ROUTINE (DBP), MAJOR
6/1/2019 - 8/31/2019	HALOACETIC ACIDS	MONITORING, ROUTINE (DBP), MAJOR
6/1/2019 - 8/31/2019	TRICHALOMETHANES	MONITORING, ROUTINE (DBP), MAJOR

**Additional Required Health Effects Language:**

Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

There are no additional required health effects violation notices. Some or all of our drinking water is supplied from another water system. The table below lists all of the drinking water contaminants, which were detected during the 2019 calendar year from the water systems that we purchase drinking water from.

Regulated Contaminants	Collection Date	Water System	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
ARSENIC	3/2/2017	WELCH CITY OF	1.1	1.1	ppb	10		Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
BARIUM	3/2/2017	WELCH CITY OF	0.257	0.257	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
FLUORIDE	3/2/2017	WELCH CITY OF	0.92	0.92	ppm	4	4	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
GROSS ALPHA, EXCL. RADON & U	1/15/2019	WELCH CITY OF	4.5	4.5	pCi/L	15	0	Erosion of natural deposits
NITRATE	1/15/2019	WELCH CITY OF	0.38	0.38	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
NITRATE-NITRITE	2/15/2018	WELCH CITY OF	0.34	0.34	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
RADIUM-228	1/15/2019	WELCH CITY OF	0.47	0.47	pCi/L		0	

Disinfection Byproducts	Monitoring Period	Water System	Highest RAA	Range	Unit	MCL	MCLG	Typical Source
No Detected Results were Found in the Calendar Year of 2019								

Secondary Contaminants	Collection Date	Water System	Highest Value	Range (low/high)	Unit	SMCL
SODIUM	3/2/2017	WELCH CITY OF	242	242	MG/L	1000
SULFATE	3/2/2017	WELCH CITY OF	2.5	2.5	MG/L	250

**Please Note: Because of sampling schedules, results may be older than 1 year.**

During the 2019 calendar year, the water systems that we purchase water from had the below noted violation(s) of drinking water regulations.

Water System	Type	Category	Analyte	Compliance Period
WELCH CITY OF	CCR REPORT	RPT	CONSUMER CONFIDENCE RULE	7/1/2019 - 7/12/2019

<b>Water System</b>	<b>Type</b>	<b>Category</b>	<b>Analyte</b>	<b>Compliance Period</b>
WELCH CITY OF	FAILURE TO COMPLETE OR SUBMIT MOR	MON	CHLORINE	1/1/2019 - 1/31/2019

There are no additional required health effects violation notices.

There are no additional required health effects notices.

Your CCR is available at [WWW://](#) . To receive a paper copy in the mail, please contact us at the phone number above.

# MCDOWELL COUNTY PSD HEMPHILL WV3302441

## Consumer Confidence Report – 2020 Covering Calendar Year – 2019

This brochure is a snapshot of the quality of the water that we provided last year. Included are the details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards. We are committed to providing you with information because informed customers are our best allies. If you would like to observe the decision-making process that affect drinking water quality, please call MAVIS BREWSTER at 304-297-2622.

Our drinking water is supplied from another water system through a Consecutive Connection (CC). To find out more about our drinking water sources and additional chemical sampling results, please contact our office at the number provided above. Your water comes from :

Source Name	Source Water Type
No other sources to display.	

Buyer Name	Seller Name
MCDOWELL COUNTY PSD HEMPHILL	WELCH CITY OF

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as those 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).

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 EPA's Safe Drinking Water Hotline (800-426-4791).

The sources of drinking water (both tap water and bottled water) included 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 sources water before we treat it include:  
Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, livestock operations and wildlife.  
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.  
Pesticides and herbicides, which may come from a variety of sources such as storm water run-off, agriculture, and residential users.  
Radioactive contaminants, which can be naturally occurring or the result of mining activity.  
Organic contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and also come from gas stations, urban storm water run-off, and septic systems.

In order to ensure that tap water is safe to drink, EPA prescribes regulation which limits the amount of certain contaminants in water provided by public water systems. We treat our water according to EPA's regulations. Food and Drug

Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Our water system has an estimated population of 322 and is required to test a minimum of 1 samples per month in accordance with the Total Coliform Rule for microbiological contaminants. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public.

### Water Quality Data

The following tables list all of the drinking water contaminants which were detected during the 2019 calendar year. The presence of these contaminants does not necessarily indicate the water poses a health risk. Unless noted, the data presented in this table is from the testing done January 1- December 31, 2019. The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

### Terms & Abbreviations

**Maximum Contaminant Level Goal (MCLG):** the "Goal" is the level of a contaminant in drinking water below which there is no known or expected risk to human health. MCLGs allow for a margin of safety.

**Maximum Contaminant Level (MCL):** the "Maximum Allowed" MCL 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.

**Secondary Maximum Contaminant Level (SMCL):** recommended level for a contaminant that is not regulated and has no MCL.

**Action Level (AL):** the concentration of a contaminant that, if exceeded, triggers treatment or other requirements.

**Treatment Technique (TT):** a required process intended to reduce levels of a contaminant in drinking water.

**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.

**Non-Detects (ND):** lab analysis indicates that the contaminant is not present.

**Parts per Million (ppm)** or milligrams per liter (mg/l)

**Parts per Billion (ppb)** or micrograms per liter (µg/l)

**Picocuries per Liter (pCi/L):** a measure of the radioactivity in water.

**Millirems per Year (mrem/yr):** measure of radiation absorbed by the body.

**Monitoring Period Average (MPA):** An average of sample results obtained during a defined time frame, common examples of monitoring periods are monthly, quarterly and yearly.

**Nephelometric Turbidity Unit (NTU):** a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person. Turbidity is not regulated for groundwater systems.

**Running Annual Average (RAA):** an average of sample results obtained over the most current 12 months and used to determine compliance with MCLs.

**Locational Running Annual Average (LRAA):** Average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

**Testing Results for: MCDOWELL COUNTY PSD HEMPHILL**

Microbiological	Result	MCL	MCLG	Typical Source
No Detected Results were Found in the Calendar Year of 2019				

Regulated Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
No Detected Results were Found in the Calendar Year of 2019							

Disinfection Byproducts	Sample Point	Monitoring Period	Highest LRAA	Range (low/high)	Unit	MCL	MCLG	Typical Source
TOTAL HALOACETIC ACIDS (HAA5)	530 COPPER RIDGE RD	2019	17	2.02 - 28.1	ppb	60	0	By-product of drinking water disinfection
TTMH	530 COPPER RIDGE RD	2019	47	0 - 51.2	ppb	80	0	By-product of drinking water chlorination

Lead and Copper	Monitoring Period	90 <sup>th</sup> Percentile	Range (low/high)	Unit	AL	Sites Over AL	Typical Source
COPPER, FREE	2019	0.348	0.0242 - 1.24	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD	2019	1.5	0 - 2	ppb	15	0	Corrosion of household plumbing systems; Erosion of natural deposits

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 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>.

Chlorine/Chloramines Maximum Disinfection Level	MPA	MPA Units	RAA	RAA Units
05/01/2019 - 05/31/2019	3.5	MG/L	2.6	MG/L

Unresolved Deficiency Identified	Facility	Comments
02/09/2016	WATER SYSTEM	The system received a Total Trihalomethane maximum contaminant level violation for the third quarter of 2014. Given that this PWS purchases finished water from the City of Welch, the PSD should work closely with the City to try to lower disinfection byproducts levels.
02/09/2016	WATER SYSTEM	The system has received violations for failure to collect or report Lead and Copper samples for the 2014 and 2015 monitoring periods. McDowell County PSD must consistently test for Lead and Copper in the drinking water in accordance with Federal Safe Drinking Water Regulations 40CFR141.86 and 40CFR141.90 as well as West Virginia Legislative Rule 34-3-10.

Analyte	Facility	Highest Value	Unit of Measure	Month Occurred
No Detected Results were Found in the Calendar Year of 2019				

Radiological Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
No Detected Results were Found in the Calendar Year of 2019							

Secondary Contaminants-Non Health Based Contaminants-No Federal Maximum Contaminant Level (MCL) Established.	Collection Date	Highest Value	Range (low/high)	Unit	SMCL
ALKALINITY, TOTAL	10/24/2019	520	430 - 520	MG/L	10000
CALCIUM	6/27/2017	8.87	8.05 - 8.87	MG/L	
CALCIUM	12/26/2019	9.6	4.4 - 9.6	MG/L	
CALCIUM HARDNESS	9/5/2019	24	12 - 24	MG/L	
CHLORINE	10/3/2019	3.5	1 - 3.5	MG/L	4
CONDUCTIVITY @ 25 C UMHOS/CM	7/26/2018	1270	1080 - 1270	UMHO/CM	
HARDNESS, CALCIUM MAGNESIUM	12/26/2019	24	11 - 24	MG/L	
HARDNESS, TOTAL (AS CaCO3)	8/29/2019	21	20 - 21	MG/L	
ORTHOPHOSPHATE	12/19/2019	0.79	0.19 - 0.79	MG/L	
PH	8/15/2019	8.2	7.8 - 8.2	SU	8.5
TEMPERATURE (CENTIGRADE)	10/10/2019	22.2	17.8 - 22.2	C	
TOTAL CHLORINE	8/29/2019	2.6	2.5 - 2.6	MG/L	

During the 2019 calendar year, we had the below noted violation(s) of drinking water regulations.

Compliance Period	Analyte	Comments
7/1/2019 - 9/27/2019	CONSUMER CONFIDENCE RULE	CCR REPORT
7/1/2019 - 7/31/2019	CHLORINE	FAILURE TO COMPLETE OR SUBMIT MOR
1/1/2019 - 9/18/2019	LEAD & COPPER RULE	FOLLOW-UP OR ROUTINE TAP M/R (LCR)
7/1/2019 - 9/18/2019	LEAD & COPPER RULE	FOLLOW-UP OR ROUTINE TAP M/R (LCR)
1/1/2019 - 3/31/2019	HALOACETIC ACIDS	MONITORING, ROUTINE (DBP), MAJOR
1/1/2019 - 3/31/2019	TRICHALOMETHANES	MONITORING, ROUTINE (DBP), MAJOR
4/1/2019 - 6/30/2019	TRICHALOMETHANES	MONITORING, ROUTINE (DBP), MAJOR
4/1/2019 - 6/30/2019	HALOACETIC ACIDS	MONITORING, ROUTINE (DBP), MAJOR
7/1/2019 - 9/30/2019	HALOACETIC ACIDS	MONITORING, ROUTINE (DBP), MAJOR
7/1/2019 - 9/30/2019	TRICHALOMETHANES	MONITORING, ROUTINE (DBP), MAJOR
2/16/2019 - 3/18/2019	PUBLIC NOTICE	PUBLIC NOTICE RULE LINKED TO VIOLATION
1/1/2019 - 6/30/2019	ALKALINITY, TOTAL	WATER QUALITY PARAMETER M/R (LCR)
1/1/2019 - 6/30/2019	ORTHOPHOSPHATE	WATER QUALITY PARAMETER M/R (LCR)
1/1/2019 - 6/30/2019	PH	WATER QUALITY PARAMETER M/R (LCR)
1/1/2019 - 6/30/2019	ORTHOPHOSPHATE	WATER QUALITY PARAMETER M/R (LCR)
1/1/2019 - 6/30/2019	PH	WATER QUALITY PARAMETER M/R (LCR)
1/1/2019 - 6/30/2019	ALKALINITY, TOTAL	WATER QUALITY PARAMETER M/R (LCR)

There are no additional required health effects notices.

There are no additional required health effects violation notices. Some or all of our drinking water is supplied from another water system. The table below lists all of the drinking water contaminants, which were detected during the 2019 calendar year from the water systems that we purchase drinking water from.



Regulated Contaminants	Collection Date	Water System	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
ARSENIC	3/2/2017	WELCH CITY OF	1.1	1.1	ppb	10		Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
BARIUM	3/2/2017	WELCH CITY OF	0.257	0.257	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
FLUORIDE	3/2/2017	WELCH CITY OF	0.92	0.92	ppm	4	4	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
GROSS ALPHA, EXCL. RADON & U	1/15/2019	WELCH CITY OF	4.5	4.5	pCi/L	15	0	Erosion of natural deposits
NITRATE	1/15/2019	WELCH CITY OF	0.38	0.38	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
NITRATE-NITRITE	2/15/2018	WELCH CITY OF	0.34	0.34	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
RADIUM-228	1/15/2019	WELCH CITY OF	0.47	0.47	pCi/L		0	

Disinfection Byproducts	Monitoring Period	Water System	Highest RAA	Range	Unit	MCL	MCLG	Typical Source
No Detected Results were Found in the Calendar Year of 2019								

Secondary Contaminants	Collection Date	Water System	Highest Value	Range (low/high)	Unit	SMCL
SODIUM	3/2/2017	WELCH CITY OF	242	242	MG/L	1000
SULFATE	3/2/2017	WELCH CITY OF	2.5	2.5	MG/L	250

**Please Note: Because of sampling schedules, results may be older than 1 year.**

During the 2019 calendar year, the water systems that we purchase water from had the below noted violation(s) of drinking water regulations.

Water System	Type	Category	Analyte	Compliance Period
WELCH CITY OF	CCR REPORT	RPT	CONSUMER CONFIDENCE RULE	7/1/2019 - 7/12/2019
WELCH CITY OF	FAILURE TO COMPLETE OR SUBMIT MOR	MON	CHLORINE	1/1/2019 - 1/31/2019

There are no additional required health effects violation notices.

There are no additional required health effects notices.

Your CCR is available at WWW://

. To receive a paper copy in the mail, please contact us at the phone number above.

# CRUMPLER COMMUNITY WATER

WV3302448

## Consumer Confidence Report – 2020 Covering Calendar Year – 2019

This brochure is a snapshot of the quality of the water that we provided last year. Included are the details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards. We are committed to providing you with information because informed customers are our best allies. If you would like to observe the decision-making process that affect drinking water quality, please call MAVIS BREWSTER at 304-297-2622.

Your water comes from :

Source Name	Source Water Type
SPRING 1-MINE/ZENITH	Ground Water
SPRING 2-MINE/JOYCE	Ground Water
SPRING 3 MINE/KERMIT	Ground Water

Buyer Name	Seller Name
There are no additional purchases to display.	

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as those 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).

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 EPA's Safe Drinking Water Hotline (800-426-4791).

The sources of drinking water (both tap water and bottled water) included 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 sources water before we treat it include:

**Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, livestock operations and wildlife.

**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.

**Pesticides and herbicides**, which may come from a variety of sources such as storm water run-off, agriculture, and residential users.

**Radioactive contaminants**, which can be naturally occurring or the result of mining activity.

**Organic contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and also come from gas stations, urban storm water run-off, and septic systems.

In order to ensure that tap water is safe to drink, EPA prescribes regulation which limits the amount of certain contaminants in water provided by public water systems. We treat our water according to EPA's regulations. Food and Drug Administration regulations establish limits for contaminants in bottled water, which

must provide the same protection for public health.

Our water system has an estimated population of 318 and is required to test a minimum of 1 samples per month in accordance with the Total Coliform Rule for microbiological contaminants. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public.

### Water Quality Data

The following tables list all of the drinking water contaminants which were detected during the 2019 calendar year. The presence of these contaminants does not necessarily indicate the water poses a health risk. Unless noted, the data presented in this table is from the testing done January 1- December 31, 2019. The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

### Terms & Abbreviations

**Maximum Contaminant Level Goal (MCLG):** the "Goal" is the level of a contaminant in drinking water below which there is no known or expected risk to human health. MCLGs allow for a margin of safety.

**Maximum Contaminant Level (MCL):** the "Maximum Allowed" MCL 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.

**Secondary Maximum Contaminant Level (SMCL):** recommended level for a contaminant that is not regulated and has no MCL.

**Action Level (AL):** the concentration of a contaminant that, if exceeded, triggers treatment or other requirements.

**Treatment Technique (TT):** a required process intended to reduce levels of a contaminant in drinking water.

**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.

**Non-Detects (ND):** lab analysis indicates that the contaminant is not present.

**Parts per Million (ppm)** or milligrams per liter (mg/l)

**Parts per Billion (ppb)** or micrograms per liter (µg/l)

**Picocuries per Liter (pCi/L):** a measure of the radioactivity in water.

**Millirems per Year (mrem/yr):** measure of radiation absorbed by the body.

**Monitoring Period Average (MPA):** An average of sample results obtained during a defined time frame, common examples of monitoring periods are monthly, quarterly and yearly.

**Nephelometric Turbidity Unit (NTU):** a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person. Turbidity is not regulated for groundwater systems.

**Running Annual Average (RAA):** an average of sample results obtained over the most current 12 months and used to determine compliance with MCLs.

**Locational Running Annual Average (LRAA):** Average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

**Testing Results for: CRUMPLER COMMUNITY WATER**

Microbiological	Result	MCL	MCLG	Typical Source
No Detected Results were Found in the Calendar Year of 2019				

Regulated Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
BARIUM	12/23/2015	0.0564	0.0564	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
NITRATE	6/19/2018	0.31	0.31	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
NITRATE-NITRITE	6/19/2018	0.31	0.31	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

Disinfection Byproducts	Sample Point	Monitoring Period	Highest LRAA	Range (low/high)	Unit	MCL	MCL G	Typical Source
TOTAL HALOACETIC ACIDS (HAA5)	271 WHISTLE POST CIRCLE	2019	2	1.52 - 1.52	ppb	60	0	By-product of drinking water disinfection

Lead and Copper	Monitoring Period	90 <sup>th</sup> Percentile	Range (low/high)	Unit	AL	Sites Over AL	Typical Source
COPPER, FREE	2019	37.3	0 - 74.5	ppm	1.3	1	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD	2019	10.5	0 - 12.2	ppb	15	0	Corrosion of household plumbing systems; Erosion of natural deposits

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 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>.

Chlorine/Chloramines Maximum Disinfection Level	MPA	MPA Units	RAA	RAA Units
09/01/2019 - 09/30/2019	2	MG/L	1.6	MG/L

Unresolved Deficiency Identified	Facility	Comments
02/07/2019	WATER SYSTEM	This public water system received violations for failure to submit a monthly operational report for the monitoring period of Feb. 1, 2018 to Feb. 28, 2018. The system must submit a monthly operational report by the 10th of the following month to avoid future violation.
02/07/2019	CRUMPLER STORAGE TANK	The overflow pipe for this tank is continuous and lacks a sanitary airgap and screen.
02/07/2019	WATER SYSTEM	The system has not address significant deficiencies noted in several of the past sanitary surveys.
02/07/2019	WATER SYSTEM	This public water system received violations for the monitoring period of Feb. 1, 2018 to Feb. 28, 2018 for either not collection T.C.R. samples or submitting the results late. The system should endeavor to submit all required samples in a timely manner to avoid future violation.
02/07/2019	CRUMPLER STORAGE TANK	The foundation of this storage facility is badly deteriorated, and the structure is likely beyond repair. The PSD should have a plan in place to replace this structure and to provide temporary finished water storage in the event of tank failure.
11/29/2016	TREATMENT PLANT	INADEQUATE DISINFECTION
11/29/2016	WATER SYSTEM	OPERATOR RESIGNED
11/29/2016	DIST SYSTEM	LOSS OF PRESSURE (LESS THAN 20 psi)
11/29/2016	DIST SYSTEM	LOW/INADEQUATE DISINFECTANT RESIDUAL

Analyte	Facility	Highest Value	Unit of Measure	Month Occurred
No Detected Results were Found in the Calendar Year of 2019				

Radiological Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
No Detected Results were Found in the Calendar Year of 2019							

Secondary Contaminants-Non Health Based Contaminants-No Federal Maximum Contaminant Level (MCL) Established.	Collection Date	Highest Value	Range (low/high)	Unit	SMCL
SODIUM	12/23/2015	33.8	33.8	MG/L	1000
SULFATE	12/23/2015	48.4	48.4	MG/L	250

During the 2019 calendar year, we had the below noted violation(s) of drinking water regulations.

Compliance Period	Analyte	Comments
7/1/2019 - 9/27/2019	CONSUMER CONFIDENCE RULE	CCR REPORT
7/10/2019	GROUNDWATER RULE	FAILURE ADDRESS DEFICIENCY (GWR)
2/1/2019 - 2/28/2019	CHLORINE	FAILURE TO COMPLETE OR SUBMIT MOR
6/1/2019 - 6/30/2019	CHLORINE	FAILURE TO COMPLETE OR SUBMIT MOR
4/10/2019	GROUNDWATER RULE	FAILURE TO CONSULT, GWR
1/1/2014 - 12/31/2019	RADIONUCLIDES	MONITORING, ROUTINE MAJOR
1/1/2017 - 12/31/2019	ARSENIC TOTAL	MONITORING, ROUTINE MAJOR
1/1/2017 - 12/31/2019	INORGANICS C	MONITORING, ROUTINE MAJOR
1/1/2017 - 12/31/2019	VOLATILE ORGANICS	MONITORING, ROUTINE MAJOR
1/1/2017 - 12/31/2019	SYNTHETIC ORGANICS 2	MONITORING, ROUTINE MAJOR
1/1/2019 - 12/31/2019	NITRATE	MONITORING, ROUTINE MAJOR
6/1/2019 - 6/30/2019	CHLORINE	MONITORING, RTN/RPT MAJOR (GWR)
2/1/2019 - 2/28/2019	CHLORINE	MONITORING, RTN/RPT MINOR (GWR)
4/20/2019 - 4/20/2019	PUBLIC NOTICE	PUBLIC NOTICE RULE LINKED TO VIOLATION
9/27/2019	PUBLIC NOTICE	PUBLIC NOTICE RULE LINKED TO VIOLATION

Additional Required Health Effects Language:

Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a 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.

There are no additional required health effects violation notices.

Water System	Type	Category	Analyte	Compliance Period
No Violations Occurred in the Calendar Year of 2019				

There are no additional required health effects violation notices.

There are no additional required health effects notices.

Your CCR is available at WWW:// . To receive a paper copy in the mail, please contact us at the phone number above.

# MCDOWELL COUNTY PSD MAYBEURY WV3302460

## Consumer Confidence Report – 2020 Covering Calendar Year – 2019

This brochure is a snapshot of the quality of the water that we provided last year. Included are the details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards. We are committed to providing you with information because informed customers are our best allies. If you would like to observe the decision-making process that affect drinking water quality, please call MAVIS BREWSTER at 304-297-2622.

Your water comes from :

Source Name	Source Water Type
WELL 1	Ground Water

Buyer Name	Seller Name
There are no additional purchases to display.	

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as those 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).

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 EPA's Safe Drinking Water Hotline (800-426-4791).

The sources of drinking water (both tap water and bottled water) included 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 sources water before we treat it include:

**Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, livestock operations and wildlife.

**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.

**Pesticides and herbicides**, which may come from a variety of sources such as storm water run-off, agriculture, and residential users.

**Radioactive contaminants**, which can be naturally occurring or the result of mining activity.

**Organic contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and also come from gas stations, urban storm water run-off, and septic systems.

In order to ensure that tap water is safe to drink, EPA prescribes regulation which limits the amount of certain contaminants in water provided by public water systems. We treat our water according to EPA's regulations. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Our water system has an estimated population of 871 and is required to test a minimum of 1 samples per month in accordance with the Total Coliform Rule for microbiological contaminants. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public.

### Water Quality Data

The following tables list all of the drinking water contaminants which were detected during the 2019 calendar year. The presence of these contaminants does not necessarily indicate the water poses a health risk. Unless noted, the data presented in this table is from the testing done January 1- December 31, 2019. The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

### Terms & Abbreviations

**Maximum Contaminant Level Goal (MCLG):** the "Goal" is the level of a contaminant in drinking water below which there is no known or expected risk to human health. MCLGs allow for a margin of safety.

**Maximum Contaminant Level (MCL):** the "Maximum Allowed" MCL 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.

**Secondary Maximum Contaminant Level (SMCL):** recommended level for a contaminant that is not regulated and has no MCL.

**Action Level (AL):** the concentration of a contaminant that, if exceeded, triggers treatment or other requirements.

**Treatment Technique (TT):** a required process intended to reduce levels of a contaminant in drinking water.

**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.

**Non-Detects (ND):** lab analysis indicates that the contaminant is not present.

**Parts per Million (ppm)** or milligrams per liter (mg/l)

**Parts per Billion (ppb)** or micrograms per liter (µg/l)

**Picocuries per Liter (pCi/L):** a measure of the radioactivity in water.

**Millirems per Year (mrem/yr):** measure of radiation absorbed by the body.

**Monitoring Period Average (MPA):** An average of sample results obtained during a defined time frame, common examples of monitoring periods are monthly, quarterly and yearly.

**Nephelometric Turbidity Unit (NTU):** a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person. Turbidity is not regulated for groundwater systems.

**Running Annual Average (RAA):** an average of sample results obtained over the most current 12 months and used to determine compliance with MCLs.

**Locational Running Annual Average (LRAA):** Average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

**Testing Results for: MCDOWELL COUNTY PSD MAYBEURY**

Microbiological	Result	MCL	MCLG	Typical Source
No Detected Results were Found in the Calendar Year of 2019				

Regulated Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
No Detected Results were Found in the Calendar Year of 2019							

Disinfection Byproducts	Sample Point	Monitoring Period	Highest LRAA	Range (low/high)	Unit	MCL	MCL G	Typical Source
TOTAL HALOACETIC ACIDS (HAA5)	378 COMPANY STORE ROAD	2019	2	1.58 - 1.58	ppb	60	0	By-product of drinking water disinfection

Lead and Copper	Monitoring Period	90 <sup>th</sup> Percentile	Range (low/high)	Unit	AL	Sites Over AL	Typical Source
COPPER, FREE	2017 - 2019	0.105	0.0174 - 0.243	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD	2017 - 2019	2.4	0 - 2.4	ppb	15	0	Corrosion of household plumbing systems; Erosion of natural deposits

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 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>.

Chlorine/Chloramines Maximum Disinfection Level	MPA	MPA Units	RAA	RAA Units
10/01/2019 - 10/31/2019	2.5	MG/L	2.0	MG/L

Analyte	Facility	Highest Value	Unit of Measure	Month Occurred
No Detected Results were Found in the Calendar Year of 2019				

Radiological Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
No Detected Results were Found in the Calendar Year of 2019							

During the 2019 calendar year, we had the below noted violation(s) of drinking water regulations.

Compliance Period	Analyte	Comments
7/1/2019 - 9/27/2019	CONSUMER CONFIDENCE RULE	CCR REPORT
1/1/2017 - 12/31/2019	ARSENIC TOTAL	MONITORING, ROUTINE MAJOR
1/1/2017 - 12/31/2019	MERCURY	MONITORING, ROUTINE MAJOR
1/1/2019 - 12/31/2019	NITRATE	MONITORING, ROUTINE MAJOR

There are no additional required health effects notices.

There are no additional required health effects violation notices.

Water System	Type	Category	Analyte	Compliance Period
No Violations Occurred in the Calendar Year of 2019				

There are no additional required health effects violation notices.

There are no additional required health effects notices.

Your CCR is available at [WWW://](http://WWW://)

. To receive a paper copy in the mail, please contact us at the phone number above.

# MCDOWELL COUNTY PSD GREENBRIER WV3302465

## Consumer Confidence Report – 2020 Covering Calendar Year – 2019

This brochure is a snapshot of the quality of the water that we provided last year. Included are the details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards. We are committed to providing you with information because informed customers are our best allies. If you would like to observe the decision-making process that affect drinking water quality, please call MAVIS BREWSTER at 304-297-2622.

Your water comes from :

Source Name	Source Water Type
SPRING/MINE	Ground Water

Buyer Name	Seller Name
There are no additional purchases to display.	

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as those 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).

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The sources of drinking water (both tap water and bottled water) included 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.

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**Pesticides and herbicides**, which may come from a variety of sources such as storm water run-off, agriculture, and residential users.

**Radioactive contaminants**, which can be naturally occurring or the result of mining activity.

**Organic contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and also come from gas stations, urban storm water run-off, and septic systems.

In order to ensure that tap water is safe to drink, EPA prescribes regulation which limits the amount of certain contaminants in water provided by public water systems. We treat our water according to EPA's regulations. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Our water system has an estimated population of 165 and is required to test a minimum of 1 samples per month in accordance with the Total Coliform Rule for microbiological contaminants. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public.

### Water Quality Data

The following tables list all of the drinking water contaminants which were detected during the 2019 calendar year. The presence of these contaminants does not necessarily indicate the water poses a health risk. Unless noted, the data presented in this table is from the testing done January 1- December 31, 2019. The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

### Terms & Abbreviations

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**Action Level (AL):** the concentration of a contaminant that, if exceeded, triggers treatment or other requirements.

**Treatment Technique (TT):** a required process intended to reduce levels of a contaminant in drinking water.

**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.

**Non-Detects (ND):** lab analysis indicates that the contaminant is not present.

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**Parts per Billion (ppb)** or micrograms per liter (µg/l)

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**Running Annual Average (RAA):** an average of sample results obtained over the most current 12 months and used to determine compliance with MCLs.

**Locational Running Annual Average (LRAA):** Average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

**Testing Results for: MCDOWELL COUNTY PSD GREENBRIER**

Microbiological	Result	MCL	MCLG	Typical Source
No Detected Results were Found in the Calendar Year of 2019				

Regulated Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
BARIUM	11/24/2019	0.0618	0.0618	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
FLUORIDE	11/24/2019	0.11	0.11	ppm	4	4	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
NITRATE	6/19/2018	0.24	0.24	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
NITRATE-NITRITE	6/19/2018	0.24	0.24	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

Lead and Copper	Monitoring Period	90 <sup>th</sup> Percentile	Range (low/high)	Unit	AL	Sites Over AL	Typical Source
COPPER, FREE	2017 - 2019	0.0527	0.0108 - 0.08	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD	2017 - 2019	2.7	0 - 4.8	ppb	15	0	Corrosion of household plumbing systems; Erosion of natural deposits

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 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>.

Chlorine/Chloramines Maximum Disinfection Level	MPA	MPA Units	RAA	RAA Units
03/01/2019 - 03/31/2019	3	MG/L	2.1	MG/L

Unresolved Deficiency Date Identified	Facility	Comments
05/03/2017	WATER SYSTEM	The PSD has not addressed the poor physical condition of this system as noted in the last Sanitary Survey. A planned regional water system, operated by the PSD, will eventually replace this water system.
05/03/2017	TREATMENT PLANT	All of the water treatment facilities associated with this system are dilapidated and have exceeded their useful life span. The PSD should make every effort to expedite the construction of the regional water system near Maybeury to provide service to the customers currently served by this system.
05/03/2017	TREATMENT PLANT	

Analyte	Facility	Highest Value	Unit of Measure	Month Occurred
No Detected Results were Found in the Calendar Year of 2019				

Radiological Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
GROSS ALPHA, EXCL. RADON & U	12/12/2019	0.05	0.05	pCi/L	15	0	Erosion of natural deposits



Secondary Contaminants-Non Health Based Contaminants-No Federal Maximum Contaminant Level (MCL) Established.	Collection Date	Highest Value	Range (low/high)	Unit	SMCL
CHLORIDE	11/24/2019	2.9	2.9	MG/L	250
SODIUM	11/24/2019	60.8	60.8	MG/L	1000
SULFATE	11/24/2019	48.2	48.2	MG/L	250

During the 2019 calendar year, we had the below noted violation(s) of drinking water regulations.

Compliance Period	Analyte	Comments
7/1/2019 - 9/27/2019	CONSUMER CONFIDENCE RULE	CCR REPORT
2/1/2019 - 2/28/2019	CHLORINE	FAILURE TO COMPLETE OR SUBMIT MOR
1/1/2017 - 12/31/2019	ARSENIC TOTAL	MONITORING, ROUTINE MAJOR
1/1/2017 - 12/31/2019	MERCURY	MONITORING, ROUTINE MAJOR
1/1/2019 - 12/31/2019	NITRATE	MONITORING, ROUTINE MAJOR
2/1/2019 - 2/28/2019	CHLORINE	MONITORING, RTN/RPT MINOR (GWR)
4/20/2019 - 4/22/2019	PUBLIC NOTICE	PUBLIC NOTICE RULE LINKED TO VIOLATION

There are no additional required health effects notices.

There are no additional required health effects violation notices.

Water System	Type	Category	Analyte	Compliance Period
No Violations Occurred in the Calendar Year of 2019				

There are no additional required health effects violation notices.

There are no additional required health effects notices.

Your CCR is available at [WWW://](http://WWW://) . To receive a paper copy in the mail, please contact us at the phone number above.

# MCDOWELL COUNTY PSD BIG FOUR WV3302471

## Consumer Confidence Report – 2020 Covering Calendar Year – 2019

This brochure is a snapshot of the quality of the water that we provided last year. Included are the details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards. We are committed to providing you with information because informed customers are our best allies. If you would like to observe the decision-making process that affect drinking water quality, please call MAVIS BREWSTER at 304-297-2622.

Your water comes from :

Source Name	Source Water Type
WELL 1	Ground Water

Buyer Name	Seller Name
There are no additional purchases to display.	

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as those 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).

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 EPA's Safe Drinking Water Hotline (800-426-4791).

The sources of drinking water (both tap water and bottled water) included 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 sources water before we treat it include:  
Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, livestock operations and wildlife.

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.

Pesticides and herbicides, which may come from a variety of sources such as storm water run-off, agriculture, and residential users.

Radioactive contaminants, which can be naturally occurring or the result of mining activity.

Organic contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and also come from gas stations, urban storm water run-off, and septic systems.

In order to ensure that tap water is safe to drink, EPA prescribes regulation which limits the amount of certain contaminants in water provided by public water systems. We treat our water according to EPA's regulations. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Our water system has an estimated population of 363 and is required to test a minimum of 1 samples per month in accordance with the Total Coliform Rule for microbiological contaminants. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public.

### Water Quality Data

The following tables list all of the drinking water contaminants which were detected during the 2019 calendar year. The presence of these contaminants does not necessarily indicate the water poses a health risk. Unless noted, the data presented in this table is from the testing done January 1- December 31, 2019. The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

### Terms & Abbreviations

**Maximum Contaminant Level Goal (MCLG):** the "Goal" is the level of a contaminant in drinking water below which there is no known or expected risk to human health. MCLGs allow for a margin of safety.

**Maximum Contaminant Level (MCL):** the "Maximum Allowed" MCL 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.

**Secondary Maximum Contaminant Level (SMCL):** recommended level for a contaminant that is not regulated and has no MCL.

**Action Level (AL):** the concentration of a contaminant that, if exceeded, triggers treatment or other requirements.

**Treatment Technique (TT):** a required process intended to reduce levels of a contaminant in drinking water.

**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.

**Non-Detects (ND):** lab analysis indicates that the contaminant is not present.

**Parts per Million (ppm)** or milligrams per liter (mg/l)

**Parts per Billion (ppb)** or micrograms per liter (µg/l)

**Picocuries per Liter (pCi/L):** a measure of the radioactivity in water.

**Millirems per Year (mrem/yr):** measure of radiation absorbed by the body.

**Monitoring Period Average (MPA):** An average of sample results obtained during a defined time frame, common examples of monitoring periods are monthly, quarterly and yearly.

**Nephelometric Turbidity Unit (NTU):** a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person. Turbidity is not regulated for groundwater systems.

**Running Annual Average (RAA):** an average of sample results obtained over the most current 12 months and used to determine compliance with MCLs.

**Locational Running Annual Average (LRAA):** Average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

**Testing Results for: MCDOWELL COUNTY PSD BIG FOUR**

Microbiological	Result	MCL	MCLG	Typical Source
No Detected Results were Found in the Calendar Year of 2019				

Regulated Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
BARIUM	12/3/2019	0.0787	0.0787	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
FLUORIDE	12/3/2019	0.08	0.08	ppm	4	4	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
NITRATE	6/19/2018	0.15	0.15	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
NITRATE-NITRITE	6/19/2018	0.15	0.15	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

Lead and Copper	Monitoring Period	90 <sup>th</sup> Percentile	Range (low/high)	Unit	AL	Sites Over AL	Typical Source
COPPER, FREE	2019	0.046	0.0165 - 0.0477	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD	2019	280	0.52 - 550	ppb	15	1	Corrosion of household plumbing systems; Erosion of natural deposits

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 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>.

Chlorine/Chloramines Maximum Disinfection Level	MPA	MPA Units	RAA	RAA Units
03/01/2019 - 03/31/2019	3.5	MG/L	2.6	MG/L

Unresolved Deficiency Identified	Facility	Comments
10/17/2019	WATER SYSTEM	The PSD has not addressed all the Significant Deficiencies noted in the Sanitary Survey dated November 13, 2014.
10/17/2019	TREATMENT PLANT	The treatment plant is now in very poor condition and has likely outlived its useful life. The PSD should investigate options to remove this facility from service and either replace the treatment plant or consolidate with some other water system.

Analyte	Facility	Highest Value	Unit of Measure	Month Occurred
No Detected Results were Found in the Calendar Year of 2019				

Radiological Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
No Detected Results were Found in the Calendar Year of 2019							

Secondary Contaminants-Non Health Based Contaminants-No Federal Maximum Contaminant Level (MCL) Established.	Collection Date	Highest Value	Range (low/high)	Unit	SMCL
CHLORIDE	12/3/2019	9.9	9.9	MG/L	250
SODIUM	12/3/2019	38.5	38.5	MG/L	1000
SULFATE	12/3/2019	51.6	51.6	MG/L	250

During the 2019 calendar year, we had the below noted violation(s) of drinking water regulations.

<b>Compliance Period</b>	<b>Analyte</b>	<b>Comments</b>
7/1/2019 - 9/27/2019	CONSUMER CONFIDENCE RULE	CCR REPORT
1/1/2014 - 12/31/2019	RADIONUCLIDES	MONITORING, ROUTINE MAJOR
1/1/2017 - 12/31/2019	ARSENIC TOTAL	MONITORING, ROUTINE MAJOR
1/1/2019 - 12/31/2019	NITRATE	MONITORING, ROUTINE MAJOR

Additional Required Health Effects Language:

Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

There are no additional required health effects violation notices.

<b>Water System</b>	<b>Type</b>	<b>Category</b>	<b>Analyte</b>	<b>Compliance Period</b>
No Violations Occurred in the Calendar Year of 2019				

There are no additional required health effects violation notices.

There are no additional required health effects notices.

Your CCR is available at [WWW://](http://WWW://)

. To receive a paper copy in the mail, please contact us at the phone number above.

# MCDOWELL COUNTY PSD BISHOP

WV3302475

## Consumer Confidence Report – 2020

Covering Calendar Year – 2019

This brochure is a snapshot of the quality of the water that we provided last year. Included are the details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards. We are committed to providing you with information because informed customers are our best allies. If you would like to observe the decision-making process that affect drinking water quality, please call MAVIS BREWSTER at 304-297-2622.

Our drinking water is supplied from another water system through a Consecutive Connection (CC). To find out more about our drinking water sources and additional chemical sampling results, please contact our office at the number provided above. Your water comes from :

Source Name	Source Water Type
No other sources to display.	

Buyer Name	Seller Name
MCDOWELL COUNTY PSD BISHOP	TOWN OF TAZEWELL, VA

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as those 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).

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 EPA's Safe Drinking Water Hotline (800-426-4791).

The sources of drinking water (both tap water and bottled water) included 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 sources water before we treat it include: **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, livestock operations and wildlife.

**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.

**Pesticides and herbicides**, which may come from a variety of sources such as storm water run-off, agriculture, and residential users.

**Radioactive contaminants**, which can be naturally occurring or the result of mining activity.

**Organic contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and also come from gas stations, urban storm water run-off, and septic systems.

In order to ensure that tap water is safe to drink, EPA prescribes regulation which limits the amount of certain contaminants in water provided by public water systems. We treat our water according to EPA's regulations. Food and Drug

Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Our water system has an estimated population of 100 and is required to test a minimum of 1 samples per month in accordance with the Total Coliform Rule for microbiological contaminants. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public.

### Water Quality Data

The following tables list all of the drinking water contaminants which were detected during the 2019 calendar year. The presence of these contaminants does not necessarily indicate the water poses a health risk. Unless noted, the data presented in this table is from the testing done January 1- December 31, 2019. The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

### Terms & Abbreviations

**Maximum Contaminant Level Goal (MCLG):** the "Goal" is the level of a contaminant in drinking water below which there is no known or expected risk to human health. MCLGs allow for a margin of safety.

**Maximum Contaminant Level (MCL):** the "Maximum Allowed" MCL 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.

**Secondary Maximum Contaminant Level (SMCL):** recommended level for a contaminant that is not regulated and has no MCL.

**Action Level (AL):** the concentration of a contaminant that, if exceeded, triggers treatment or other requirements.

**Treatment Technique (TT):** a required process intended to reduce levels of a contaminant in drinking water.

**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.

**Non-Detects (ND):** lab analysis indicates that the contaminant is not present.

**Parts per Million (ppm)** or milligrams per liter (mg/l)

**Parts per Billion (ppb)** or micrograms per liter (µg/l)

**Picocuries per Liter (pCi/L):** a measure of the radioactivity in water.

**Millirems per Year (mrem/yr):** measure of radiation absorbed by the body.

**Monitoring Period Average (MPA):** An average of sample results obtained during a defined time frame, common examples of monitoring periods are monthly, quarterly and yearly.

**Nephelometric Turbidity Unit (NTU):** a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person. Turbidity is not regulated for groundwater systems.

**Running Annual Average (RAA):** an average of sample results obtained over the most current 12 months and used to determine compliance with MCLs.

**Locational Running Annual Average (LRAA):** Average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

**Testing Results for: MCDOWELL COUNTY PSD BISHOP**

Microbiological	Result	MCL	MCLG	Typical Source
COLIFORM (TCR)	In the month of July, 1 sample(s) returned as positive	Treatment Technique Trigger	0	Naturally present in the environment

Regulated Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
No Detected Results were Found in the Calendar Year of 2019							

Disinfection Byproducts	Sample Point	Monitoring Period	Highest LRAA	Range (low/high)	Unit	MCL	MCLG	Typical Source
TOTAL HALOACETIC ACIDS (HAA5)	130 SKYGUSTY HIGHWAY	2019	49	27.4 - 37.5	ppb	60	0	By-product of drinking water disinfection
TTHM	130 SKYGUSTY HIGHWAY	2019	41	4.96 - 62.3	ppb	80	0	By-product of drinking water chlorination

Lead and Copper	Monitoring Period	90 <sup>th</sup> Percentile	Range (low/high)	Unit	AL	Sites Over AL	Typical Source
COPPER, FREE	2017 - 2019	0.0344	0.0032 - 0.0547	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD	2017 - 2019	0.4	0 - 0.5	ppb	15	0	Corrosion of household plumbing systems; Erosion of natural deposits

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 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>.

Chlorine/Chloramines Maximum Disinfection Level	MPA	MPA Units	RAA	RAA Units
04/01/2019 - 04/30/2019	2	MG/L	1.3	MG/L

Unresolved Deficiency Date Identified	Facility	Comments
08/19/2016	WATER SYSTEM	McDowell County PSD failed to notify customers or failed to submit certification of notification to the Office of Environmental Health Services related to Lead and Copper sampling for the 2015 sampling period.

Analyte	Facility	Highest Value	Unit of Measure	Month Occurred
No Detected Results were Found in the Calendar Year of 2019				

Radiological Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
No Detected Results were Found in the Calendar Year of 2019							

During the 2019 calendar year, we had the below noted violation(s) of drinking water regulations.

Compliance Period	Analyte	Comments
7/1/2019 - 9/27/2019	CONSUMER CONFIDENCE RULE	CCR REPORT
12/1/2018 - 2/28/2019	TRIHALOMETHANES	MONITORING, ROUTINE (DBP), MAJOR
12/1/2018 - 2/28/2019	HALOACETIC ACIDS	MONITORING, ROUTINE (DBP), MAJOR

Additional Required Health Effects Language:

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.

There are no additional required health effects violation notices. Some or all of our drinking water is supplied from another water system. The table below lists all of the drinking water contaminants, which were detected during the 2019 calendar year from the water systems that we purchase drinking water from.

Disinfection Byproducts	Monitoring Period	Water System	Highest RAA	Range	Unit	MCL	MCLG	Typical Source
No Detected Results were Found in the Calendar Year of 2019								

**Please Note: Because of sampling schedules, results may be older than 1 year.**

During the 2019 calendar year, the water systems that we purchase water from had the below noted violation(s) of drinking water regulations.

Water System	Type	Category	Analyte	Compliance Period
No Violations Occurred in the Calendar Year of 2019				

There are no additional required health effects violation notices.

There are no additional required health effects notices.

Your CCR is available at [WWW://](http://WWW://)

. To receive a paper copy in the mail, please contact us at the phone number above.