# Sharpsburg Water District Water Quality Report 2020

| Water System ID: | KY0060392 CCR Contact: ( | Gayle Haney Mailing  | Address:      | Meeting location and time:     |
|------------------|--------------------------|----------------------|---------------|--------------------------------|
| Manager: Gayle H | aney 606-247-2861        | P.O. Boy             |               | 16 East Mill Street            |
| 606-247-2861     | gayleh12@win             | dstream.net Sharpsbu | arg, KY 40374 | 2nd Wednesday, monthly at 7 PM |

The source of drinking water for the Sharpsburg Water District is surface water from the Licking River. Our drinking water is treated by the Carlisle Water Department and the Morehead Utility Plant Board. Water for our customers in Bath County is treated by Morehead and sold to Bath County Water District, which in turn sells to Sharpsburg Water District. The remainder of our customers are supplied by water from Carlisle Water Department. Contact the Sharpsburg Water District office if you have questions about the water source for your specific address.

The susceptibility of the Licking River to contamination is considered to be moderate. Contaminant sources of concern include; transportation corridors; chemical and fuel storage; and agricultural pesticide and fertilizer application. Activities and land use within the watershed can pose potential risks to your drinking water. Under certain circumstances contaminants could be released that would pose challenges to water treatment or even get into your drinking water. These activities, and how they are conducted, are of interest to the entire community because they potentially affect your health and the cost of treating your water. The complete source water assessment is available for review at the Carlisle Water Department and the Morehead Utility Plant Board.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects may be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

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

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Your local public water system is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

# To understand the possible health effects described for many regulated contaminants, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

### **Regulated Contaminant Testing Results for Carlisle Water Department**

| Report     Level       0.011     0.73       0.374     0.374 | 0.011                        | Rang<br>f Dete<br>to<br>to    | 0                             | Date of<br>Sample<br>Feb-20<br>Feb-20         | Violation<br>No<br>No                                   | Likely Source of<br>Contamination<br>Drilling wastes; metal refineries;<br>erosion of natural deposits<br>Water additive which promotes<br>strong teeth |
|---|------------------------------|-------------------------------|-------------------------------|---|---|---|
| 0.011   | 0.011                        | to                            | 0.011                         | Feb-20  |   | Drilling wastes; metal refineries;<br>erosion of natural deposits<br>Water additive which promotes  |
| 0.73  |                              |                               |                               |   |   | erosion of natural deposits<br>Water additive which promotes  |
|   | 0.73                         | to                            | 0.73                          | Feb-20  | No  | Water additive which promotes   |
|   | 0.73                         | to                            | 0.73                          | Feb-20  | No  | 1   |
| 0.274   |                              |                               |                               |   | 1   | strong teeth  |
| 0.374   | 0.374                        | to                            | 0.374                         | Feb-20  | No  | Fertilizer runoff; leaching from<br>septic tanks, sewage; erosion of<br>natural deposits  |
| 1.51<br>(lowest<br>average)                                 | 1.36<br>(m                   | to<br>onthly                  | 1.95<br>ratios)               | 2020  | No  | Naturally present in environment.   |
| noval required. An  |                              | -                             | ,                             | eater for compli                              | iance.  |   |
|   |                              |                               |                               |   |   |   |
| Highest Single  |                              |                               | Lowest                        | Violation                                     |   |   |
| Measurement   |                              | N                             | Aonthly %                     |   | Likely Source of Turbidity                              |   |
| 0.29  |                              |                               | 100                           | No  | o Soil runoff   |   |
|   | Highest Singl<br>Measurement | Highest Single<br>Measurement | Highest Single<br>Measurement | Highest Single Lowest   Measurement Monthly % | Highest Single Lowest Violation   Measurement Monthly % | Inval required. Annual average must be 1.00 or greater for compliance.   Highest Single Lowest Violation   Measurement Monthly % Likely Source          |

## **Regulated Contaminant Testing Results for Morehead Utility Plant Board**

| <b>Regulated Contaminant</b>    | Test Resu                   | ılts                   | Morehead           | Utility Pla      | nt Board          |                   |                            |   |
|---------------------------------|-----------------------------|------------------------|--------------------|------------------|-------------------|-------------------|----------------------------|---|
| Contaminant                     |                             |                        | Report             | 1                | Range             | Date of           | Violation                  | Likely Source of  |
| [code] (units)                  | MCL MCLG Level of Detection |                        | Detection          | Sample           |                   | Contamination     |                            |   |
| Combined radium                 | 5                           | 0                      | 1.02               | 1.02 1           | to 1.02           | May-20            | No                         | Erosion of natural deposits                                       |
| (pCi/L)                         |                             |                        |                    |                  |                   |                   |                            | Erosion of natural deposits                                       |
| Barium                          |                             |                        |                    |                  |                   |                   |                            |   |
| [1010] (ppm)                    | 2                           | 2                      | 0.016              | 0.016 1          | to 0.016          | Mar-20            | No                         | Drilling wastes; metal refineries;<br>erosion of natural deposits |
| Fluoride                        |                             |                        |                    |                  |                   |                   |                            |   |
| [1025] (ppm)                    | 4                           | 4                      | 0.56               | 0.56 1           | to 0.56           | Mar-20            | No                         | Water additive which promotes strong teeth                        |
| Nitrate                         |                             |                        |                    |                  |                   |                   |                            | Fertilizer runoff; leaching from                                  |
| [1040] (ppm)                    | 10                          | 10                     | 0.279              | 0 1              | to 0.279          | Feb-20            | No                         | septic tanks, sewage; erosion of natural deposits                 |
| Total Organic Carbon (ppm)      |                             |                        | 1.12               |                  |                   |                   |                            |   |
| (measured as ppm, but           | TT*                         | N/A                    | (lowest            | 1.00             | to 1.30           | 2020              | No                         | Naturally present in environment.                                 |
| reported as a ratio)            |                             |                        | average)           | (monthly ratios) |                   |                   |                            |   |
| *Monthly ratio is the % TOC rem | oval achieved               | to the % TOC rem       | noval required. An | nual average r   | nust be 1.00 or g | eater for complia | ance.                      |   |
| Other Constituents              |                             |                        |                    |                  |                   |                   |                            |   |
| Turbidity (NTU) TT              | Allowable                   |                        | Highest Single     |                  | Lowest            | Violation         | ation                      |   |
| * Representative samples        | Levels                      |                        | Measurement        |                  | Monthly %         |                   | Likely Source of Turbidity |   |
| Turbidity is a measure of the   | No more than 1 NTU*         |                        |                    |                  |                   |                   |                            |   |
| clarity of the water and not a  | Less than 0.3 NTU in        |                        | 0.192              | 0.192            |                   | No                |                            | Soil runoff   |
| contaminant.                    | 95% of mor                  | 95% of monthly samples |                    |                  |                   |                   |                            |   |

### **Regulated Contaminant Testing Results for Sharpsburg Water District**

| <b>Regulated Contaminan</b>  | t Test Re | sults | Sharpsburg  | Water                 | Distr   | rict              |        |                  |   |
|------------------------------|-----------|-------|-------------|-----------------------|---------|-------------------|--------|------------------|---|
| Contaminant                  |           |       | Report      | Range<br>of Detection |         | Date of Violation |        | Likely Source of |   |
| [code] (units)               | MCL       | MCLG  | Level       |                       |         | Sample            |        | Contamination    |   |
| Chlorine                     | MRDL      | MRDLG | 0.95        |                       |         |                   |        |                  | Water additive used to control              |
| (ppm)                        | = 4       | = 4   | (highest    | 0.9                   | to      | 1.1               | 2020   | No               | microbes.                                   |
|                              |           |       | average)    |                       |         |                   |        |                  |   |
| HAA (ppb) (Stage 2)          |           |       | 49          |                       |         |                   |        |                  |   |
| [Haloacetic acids]           | 60        | N/A   | (high site  | 30                    | to      | 56                | 2020   | No               | Byproduct of drinking water<br>disinfection |
|                              |           |       | average)    | (range o              | f indiv | idual sites)      |        |                  |   |
| TTHM (ppb) (Stage 2)         |           |       | 69          |                       |         |                   |        |                  |   |
| [total trihalomethanes]      | 80        | N/A   | (high site  | 38                    | to      | 107               | 2020   | No               | Byproduct of drinking water disinfection.   |
|                              |           |       | average)    | (range o              | f indiv | idual sites)      |        |                  |   |
| Household Plumbing C         | ontamina  | ints  |             |                       |         |                   |        |                  |   |
| Copper [1022] (ppm)          | AL =      |       | 0.163       |                       |         |                   |        |                  |   |
| sites exceeding action level | 1.3       | 1.3   | (90th       | 0.0334                | to      | 0.306             | Jul-20 | No               | Corrosion of household plumbing systems     |
| 0                            |           |       | percentile) |                       |         |                   |        |                  | systems                                     |
| Lead [1030] (ppb)            | AL =      |       | 0           |                       |         |                   |        |                  |   |
| sites exceeding action level | 15        | 0     | (90th       | 0                     | to      | 2                 | Jul-20 | No               | Corrosion of household plumbing systems     |
| 0                            |           |       | percentile) |                       |         |                   |        |                  | 5,500115                                    |

#### Violations

# Sharpsburg Water District was in full compliance with all state and federal regulations for the year 2020; however, Carlisle Water Department (one of our suppliers) was not.

#### Violation 2020-9917647

In May of 2019, Carlisle Water received a violation because more than 5% of their samples had a high turbidity reading during a time in which they had a main intake pump failure. Carlisle informed their customers of the turbidity issue at the time, but did not perform a full public notice. A public notification was sent to all customers, but the notification was sent late. Notification was due by 9/14/2019 but wasn't sent out until 12/6/2019. Because of this, Carlisle was issued another violation once the state reviewed the paperwork. All paperwork has been submitted to the state and Carlisle Water has taken steps to ensure they do not have this kind of oversight in the future.

