Contaminants that may be present in source water include;

Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural 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 agriculture, urban storm water runoff, and residential uses.

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

Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulation which limits the amount of certain contaminants in water provided by public water systems. FDA regulation establishes limits for contaminants in bottled water which must provide the same protection for public health.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised people, such as people with cancer undergoing chemotherapy, people who have undergone organ transplant, people with HIV/AIDS or other kind of 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 which are available from the Safe Drinking Water Hotline at (800) 426-4791.

We are proud that your drinking water meets or exceeds all federal and state requirements. We test for many contaminants or constituents and are proud that all are below required levels of concern. Thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. These improvements are sometimes reflected as rate structure adjustments. Thank you for understanding.

To help protect the groundwater and our water supply wells from potential contamination, the Town of Morristown is currently implementing a Wellhead Protection Plan, this may be reviewed at the Town Hall. The Wellhead Protection Plan focuses on public awareness and education and spill prevention and reporting. For more information or to join the local planning team and assist with the implementation of the Wellhead Protection Plan, contact the Town of Morristown at 765-763-6748, for more information.

**Household Tips for Protecting our Drinking Water Supply**

* Reduce the amount of fertilizers, pesticides, or other hazardous chemicals that you use. Buy only what you need so that you don’t have to dispose of leftovers. Read all the labels and follow directions.
* Use organic lawn and garden alternatives that do not contain synthetic chemical poisons.
* Properly plug and abandon water wells that are no longer in use. Contact a licensed well driller for assistance.
* If you have a septic system, have is serviced regularly.
* Recycle used oil, automotive fluids, batteries, and other products. Don’t dispose of hazardous products in toilets, storm drains, wastewater systems, creeks, alleys, or the ground. This pollutes the water supply. Contact the Shelby County Solid Waste Management District at 317-392-8904 or [www.cleanshelby.org](http://www.cleanshelby.org) for information about disposal opportunities in Shelby County.

Again, this year your Morristown Municipal Water and Sanitation Utility has provided safe drinking water to you. We strive to provide quality water to each and every tap. We ask that all customers help us protect our water sources.

For more information regarding this report contact: Gary Rogers at (765) 763-7112 or the Town Office (765) 763-6748. If you want to learn more you are invited to attend the Town Council meetings held the 2nd and 4th Wednesday of every month at 7:00 p.m. in the Town Hall located at 418 W. Main St.

TOWN OF MORRISTOWN

ANNUAL WATER REPORT

(765) 763-7112/ (765) 763-6748

www.morristown.in.gov

Quality on Tap

January 1, 2018 – December 31, 2018



Town of Morristown

Annual Water Report

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January 1, 2018 – December 31, 2018

 This brochure is a snapshot of the quality of the drinking water that we provided last year. Included as part of this report are details about where the water you drink comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and Indiana Standards. We are committed to provide you with all the information that you need to know about the quality of the water you drink.

 Our water comes from wells located in the northeastern quadrant of Morristown. The wells draw from the Blue River Valley “outwash” aquifer. Water is pumped to two treatment plants, treated for the removal of iron and then disinfected with chlorine gas. The treated water is then pumped to either of the elevated storage tanks. The elevated tanks are used for system pressure, water detention, and fire protection.

 As water travels over the surface of the land or through the ground, it can pick up substances or contaminates such as microbes, organic and inorganic chemicals and radioactive substances. Morristown Water Department has completed a Source Water Assessment. The assessment has indicated that the drinking water has a low susceptibility to contamination, since the wells are completed in a sand and gravel (Bedrock) aquifer. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk or that is it not suitable for drinking. More information about contaminants and their potential health effects can be obtained by calling the EPA’s Safe Drinking Water Hotline at (800)426-4791.

 Morristown Municipal Water and Sanitation Utility routinely monitors your water for these constituents according to federal and state law. Our monitoring cycle is set forth in the Standardized Monitoring Framework (SMF) from the Indiana Department of Environmental Management (IDEM) and federal regulations. We are proud that the water treatment and testing results over the years have allowed Morristown Municipal Water and Sanitation Utility to be granted waivers for some constituents. Our waiver includes monitoring for the asbestos, polychlorinated biphenyls (PCBs), dioxin (2,3,7,8-TCDD), glyphosate, cyanide and alachlor. We have also been able to reduce the frequency of testing for other areas of our Standardized Monitoring Framework (SMF) through this waiver.

 To understand the possible health effects described for many regulated constituents, a person would have to drink two liters of water every day at the MCL (Maximum Contaminant Level) level for a lifetime to have a one in a million chance of having the described health effect. The following tables show our monitoring results for this year’s Standardized Monitoring Framework (SMF) compliance schedule.

**Coliform Bacteria**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Maximum Contaminant Level Goal | Total Coliform Maximum Contaminant Level | Highest No. of Positive | Fecal Coliform or E. Coli Maximum Contaminant Level | Total No. of Positive E. Coli or Fecal Coliform Samples | Violation | Likely Source of Contamination |
| 0 |  | 0 |  | 0 | N | Naturally present in the environment |

**Lead and Copper**

Definitions:

Action Level Goal (ALG): The level of contaminant in drinking water below which there is no known risk to health. TLGs allow for a margin of safety.

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

 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. We are responsible for providing high quality water, but we 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://epa.gov/safewater/lead>

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Lead and Copper** | **Date Sampled** | **MCLG** | **Action Level (AL)** | **90th Percentile** | **# Sites Over AL** | **Units** | **Violation** | **Likely Source of Contamination** |
| Copper | 2018 | 1.3 | 1.3 | 0.09 | 0 | ppm | N | Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems. |
| Lead | 2018 | 0 | 15 | 3.1 | 0 | ppb | N | Corrosion of household plumbing systems; Erosion of natural deposits. |

**Water Quality Test Results**

Definitions: The following tables contain scientific terms and measures, some of which may require explanation.

Maximum Contaminant Level Goal or MCLG: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG’s allow for a margin of safety.

Maximum Contaminant Level or MCL: The highest level of a contaminant that is allowed in drinking water. MCL’s are set as close to the MCLG’s as feasible using the best available treatment technology.

Maximum residual disinfectant level goal or MRDLG: The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG’s do not reflect the benefits for the use of disinfectants to control microbial contaminants.

Maximum residual disinfectant level or 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.

Avg: Regulatory compliance with some MCLs are based on running annual average of monthly samples.

ppm: milligrams per liter or parts per million-or one ounce in 7,350 gallons of water.

ppb: micrograms per liter or parts per billion-or one ounce in 7,350,000 gallons of water.

na: not applicable.

BDL: Below Detection Limit

**Regulated Contaminants**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Disinfectants and Disinfection By-Products** | **Collection Date** | **Highest Level Detected** | **Range of Levels Detected** | **MCLG** | **MCL** | **Units** | **Violation** | **Likely Source of Contamination** |
| Haloacetic Acids (HAA5) | 2018 | 5 | 5.1-5.1 | No goal for the total | 60 | ppb | N | By-product of drinking water chlorination |
| Total Trihalomethanes (TThm)\* | 2018 | 18 | 18.4-18.4 | No goal for the total | 80 | ppb | N | By-product of drinking water chlorination. |
| Chlorine | 2018 | 1 | 0-1 | MRDLG=4 | MRDL=4 | PPM | N | Water additive used to control microbes |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Inorganic Contaminants** | **Collection Date** | **Highest Level Detected** | **Range of Levels Detected** | **MCLG** | **MCL** | **Units** | **Violation** | **Likely Source of Contamination** |
| Arsenic | 2018 | 1.5 | 0.6-1.5 | 0 | 10 | ppb | N | Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes. |
| Barium | 2018 | 0.347 | 0.315-0.347 | 2 | 2 | ppm | N | Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits. |
| Fluoride | 2018 | 1 | 0.8-1 | 4 | 4.0 | ppm | N | Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories. |
| Nitrate (measured as Nitrogen) | 2018 | 1 | 0.39-0.54 | 10 | 10 | ppm | N | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits. |
|  |  |  |  |  |  |  |  |  |
| **Radioactive****Contaminants** | **Collection****Date** | **Highest Level Detected** | **Range of Levels Detected** | **MCLG** | **MCL** | **Units** | **Violation** | **Likely Source of Contamination** |
| Beta/photon emitters | 6/8/2010 | 3.6 | 0-3.6 | 0 | 4 | mrem/yr | N | Decay of natural and man-made deposits |