# Southern Montgomery County Municipal Utility District

# 2018 Annual Drinking Water Quality Report

## Our Drinking Water Meets or Exceeds All Federal Drinking Water Requirements

This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water. In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottle water which must provide the same protection for public health.

## Sources of Drinking Water

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 can 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, 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 a 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.

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 EPAs Safe Drinking Water Hotline at (800)426-4791. Contaminants may be found in drinking water that may cause taste, color, or odor problems. These types of problems are not necessarily causes for health concerns. For more information on taste, odor, or color of drinking water, please contact the system's business office.

## Special Notice for the Elderly, Infants, Cancer Patients, People with HIV/AIDS or Other Immune Problems

You may be more vulnerable than the general population to certain microbial contaminants, such as Cryptosporidium, in drinking water. Infants, some elderly, or immunocompromised persons such as those undergoing chemotherapy for cancer, persons who have undergone organ transplants: those who are undergoing treatment with steroids: and people with HIV/AIDS or other immune system disorders, can be particularly at risk from infection. You should seek advice about drinking water from your physician or health care providers. Additional guidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the Safe Drinking Water Hotline (800)426-4791.

If you have any questions regarding this report, contact Stefanie Miller at 281-367-5383. Public input concerning your water system may be made at the water board meeting at 6:00 pm on the third Wednesday of the month at 25212 Interstate 45 North, Spring, Texas 77386.

**<u>En Español</u>**

Este reporte incluye informacion importante sobre el agua para tomar. Para asistencia en espanol, favor de llamar al telefono 281-367-5383.

## Where Do We Get Our Water From?

Drinking water provided by Southern Montgomery County MUD is obtained from ground water and surface water sources. The ground water comes from the Evangeline, Chicot and the Jasper Aquifers. Surface water is supplied by San Jacinto River Authority and is treated water from Lake Conroe. A Source Water Susceptibility Assessment for your drinking water source(s) is currently being updated by the Texas Commission on Environmental Quality. This information describes the susceptibility and types of constituents that may come into contact with your drinking water source based on human activities and natural conditions. The information contained in the assessment allows us to focus source water protection strategies. For more information about your sources of water, please refer to the Source Water Assessment Viewer available at the following URL: http://gis3.tceq.state.tx.us/swav/Controller/index.jsp?wtrsrc=. Further details about sources and source-water assessments are available in Drinking Water Watch at the following URL: http://dww.tceq.texas.gov/DWW.

| Drinking Water Definitions and Abbreviations | |
|---|---|
| **Maximum Contaminant Level or 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. | **Action Level:** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow. |
| **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. MCLGs allow for a margin of safety. | **Action Level Goal (ALG):** The level of contaminant in drinking water below which there is no know or expected risk to health. ALGs allow for a margin of safety. |
| **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. | **Level 1 Assessment:** A level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system. |
| **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. MRDLGs do not reflect the benefits of the use of disinfectants to control of microbial contaminants. | **Level 2 Assessment:** A level 2 is a very detailed study of the water system to identify potential problems and determine (if possible) why E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our system on multiple occasions. |
| **Avg:** Regulatory compliance with some MCLs are based on running annual average of monthly samples. | **NTU:** Nephelometic turbidity units |
| **Na:** Not applicable | **pCi/L:** Picocuries per litter |
| **MFL:** Million fibers per liter (a measure of turbidity) | **ppb:** Micrograms per liter or parts per billion |
| **Mrem:** Millirems per year (a measure of radiation adsorbed by the body) | **ppm:** Milligrams per liter or parts per million |
| **Ppt:** Parts per quadrillion, or nanograms per litter (ng/L) | **Ppq:** Parts per quadrillion, or picograms per liter (pg/L) |
| **Treatment Technique or TT:** A required process intended to reduce the level of a contaminant in drinking water. | |

**Lead and Copper**

| Contaminant | Year | MCLG | Action Level (AL) | 90th Percentile | # Sites over AL | Units | Violation | Source of Contamination |
|---|---|---|---|---|---|---|---|---|
| Copper | 2016 | 1.3 | 1.3 | 0.102 | 0 | ppm | N | Erosion of natural deposits: Leaching from wood preservatives; Corrosion of household plumbing systems. |
| Lead | 2016 | 0 | 15 | 2.7 | 0 | ppb | N | 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. 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.

| Inorganic Contaminants | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Contaminant | Year | Highest Level | Range of Levels | MCLG | MCL | Units | Violation | Source of Contamination |
| Arsenic | 2017 | 2.6 | 2.1-2.6 | 0 | 10 | ppb | N | Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes. |
| Barium | 2017 | 0.187 | 0.106-0.187 | 2 | 2 | ppm | N | Discharge or drilling wastes; Discharge from metal refineries; Erosion of natural deposits. |
| Fluoride | 2017 | 0.63 | 0.38-0.63 | 4 | 4 | ppm | N | Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories. |
| Nitrate (measured as Nitrogen) | 2018 | 0.11 | 0.02-0.11 | 10 | 10 | ppm | N | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits. |
| **Radioactive Contaminants** | | | | | | | | |
| Contaminant | Year | Highest Level | Range of Levels | MCLG | MCL | Units | Violation | Source of Contamination |
| Combined Radium 226/228 | 2016 | 0.56 | 0.56-0.56 | 0 | 5 | pCi/L | N | Erosion of natural deposits. |
| Gross Alpha Excluding Radon and Uranium | 2016 | 4.5 | 0-4.5 | 0 | 15 | pCi/L | N | Erosion of natural deposits. |
| **Disinfection By-Product** | | | | | | | | |
| Contaminant | Year | Highest Level | Range of Levels | MCLG | MCL | Units | Violation | Source of Contamination |
| Haloacetic Acids (HAA5) | 2018 | 15.8 | 12-15.8 | No Goal | 60 | ppb | N | By-product of drinking water disinfection. |
| Total Trihalomethanes (TTHM) | 2018 | 37.4 | 36.4-37.4 | No Goal | 80 | ppb | N | By-product of drinking water disinfection. |
| **Volatile Organic Contaminants** | | | | | | | | |
| Contaminant | Year | Highest Level | Range of Levels | MCLG | MCL | Units | Violation | Likely Source of Contamination |
| Xylenes | 2018 | 0.0016 | 0-0.0016 | 10 | 10 | ppm | N | Discharge from petroleum factories; Discharge from chemical factories. |
| **Maximum Residual Disinfectant Level** | | | | | | | | |
| Contaminant | Year | Avg. Level | Range of Levels | MRDL | MRDLG | Units | Violation | Source of Contamination |
| Chlorine Residual | 2018 | 1.27 | 0.51-2.8 | 4 | 4 | ppm | N | Disinfectant used to control microbes. |

| Water Loss |
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| In the water loss audit submitted to the Texas Water Development Board for the time of January – December 2018, our system had a water loss of 6.16%. If you have any questions about the water loss audit, please call 281-367-5383. |

During 2018, Southern Montgomery County MUD received surface water from **San Jacinto River Authority**. The following table contains all the chemical contaminants found in the San Jacinto River Authority's water supply.

| **Turbidity** | | | | | | |
|---|---|---|---|---|---|---|
| Contaminant | Year | Average Level | Range of Levels | Monthly Limits | Units | Source of Contamination |
| Turbidity | 2018 | 0.04 | 0.02-0.06 | 0.3 | NTU | Soil Runoff. |