**2017 Annual Drinking**

**Water Quality Report**

**\_\_\_\_\_\_\_\_\_\_(Consumer Confidence Report)\_\_\_\_\_\_\_\_**

**CHATFIELD WSC (PWS) ID # 1750012**

*Phone Number: (903)345-3463*

**SPECIAL NOTICE**

**Required language for ALL community public water supplies:**

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; those 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 infections. You should seek advice about drinking water from your physician or health care provider. Additional guidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the Safe Drinking Water Hotline at (800) 426-4791.

**Public Participation**

**Opportunities**

**Date:** 3rd Monday of Each Month

**Time:** 7:00 p.m.

**Location:** 106 Carr St. Powell, Texas 75153

**Phone Number:** 903-345-3463

To learn about future meetings (concerning your drinking water), or to request to schedule one, please call us.

CHATFIELD WSC purchases water from the CITY OF CORSICANA (PWS # 1750002). CITY OF CORSICANA provides purchase surface water from Lake Halbert & Navarro Mills located in Navarro County, Texas.

Annual Water Quality Report for the period of January 1 to December 31, 2017

**OUR DRINKING WATER IS REGULATED**

This report is a summary of the quality of water we provide our customers. The analysis was made by using the data from the most recent U.S. Environmental Protection Agency (EPA) required tests and is presented in the attached pages. We hope this information helps you become more knowledgeable about what’s in your drinking water.

**Source 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 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.

En Español

Este informe incluye información importante sobre el agua potable. Si tiene preguntas o comentarios sobre este informe en español, favor de llamar al tel. (903)345-3463

**Where do we get our drinking water? Lake Halbert & Navarro Mills Lake – City of Corsicana.**

TCEQ completed a Source Water Susceptibility for all drinking water systems that own their sources. This report describes the susceptibility and types of constituents that may come into contact with the drinking water source based on human activities and natural conditions. The system(s) from which we purchase our water received the assessment report. For more information on source water assessments and protection efforts at our system contact Jim Metcalfe at (903) 345-3463.

For more information about your sources of water, please refer to the Source Water Assessment Viewer 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 flowing URL: <http://dww.tceq.texas.us.gov/DWW>.

**All drinking water may contain contaminants**

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.

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 (1-800-426-4791).

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 bottled water which must provide the same protection for public health.

**Required Additional Health Information for Lead**

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. This water supply 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> .

**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 a known or expected risk to health. MCLGs allow for a margin of safety.

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 residual disinfectant level goal (MRDLG) The level of drinking water disinfectant below which there is a known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

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 a contaminant.

mrem: millirems per year (a measure of radiation absorbed by the body)

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

na: not applicable

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.

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.

Level 2 Assessment: A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. Coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

MFL: million fibers per liter (a measure of asbestos)

NTU: millirems per year (a measure of radiation absorbed by the body)

pCi/L picocuries per liter (a measure of radioactivity)

Treatment Technique or TT: A required process intended to reduce the level of a contaminant in drinking water.

ppt: parts per trillion, or nanograms per liter (ng/L)

ppq parts per quadrillion, or pictograms per liter (pg/L)

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

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

**2017 Regulated Contaminants Detected**

**Maximum Residual Disinfectant Level from – Chatfield WSC**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Disinfectant**  **Type** | **Average**  **Level** | **Range of Levels Detected** | **MRDL** | **MRDLG** | **Unit of Measure** | **Violation (Y/N)** | **Source** |
| Chlorine and Chloramine | 1.545 | 0.4 – 4.5 ppm | 4.0 | 4.0 | ppm | \*Y | Water additive used to control microbes. |

\*During September and October 2017 sufficient levels of chlorine residual were not met in more than five percent (5%) of monthly samples, only affecting approximately 65 customers between Corsicana and the Powell and Roane pump stations.

**Lead and Copper from – Chatfield WSC**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Lead and Copper** | **Date**  **Sampled** | **MCLG** | **Action Level (AL)** | **90th**  **Percentile** | **# Sites**  **Over Al** | **Units** | **Violation** | **Likely Source of Contamination** |
| Copper | 2016 | 1.3 | 1.3 | 0.12 | 0 | ppm | N | Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems. |
| Lead | 2016 | 0 | 15 | 4 | 0 | ppb | N | Corrosion of household plumbing systems; Erosion of natural deposits |

**Regulated Contaminants from – Chatfield WSC**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Disinfectants and Disinfection By-Products** | **Collection Date** | **Highest**  **Level or**  **Average**  **Detected** | **Range of Individual**  **Samples** | **MCLG** | **MCL** | **Units** | **Violation** | **Likely Source of Contamination** |
| Haolacetic Acids  (HAA5) | 2017 | 45 | 0 –  150 | No goal for the total | 60 | ppb | N | By-product of drinking water chlorination |
| Total Trihalomethanes (TThm) | 2017 | 76 | 32.5 –  132 | No goal for the total | 80 | ppb | N | By-product of drinking water chlorination |

‘\* The value in the Highest Level or Average Detected column is the highest average of all HAA5 samples collected at a location over a year’

‘\* The value in the Highest Level or Average Detected column is the highest average of all TTHM sample results collected at a location over a year’

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Inorganic Contaminants** | **Collection Date** | **Highest**  **Level or**  **Average**  **Detected** | **Range**  **of Individual**  **Samples** | **MCLG** | **MCL** | **Units** | **Violation** | **Likely Source of Contamination** |
| Nitrate [measured as Nitrogen] | 2017 | 0.146 | 0.146 –  0.146 | 10 | 10 | ppm | N | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits |

**Coliform Bacteria from – Chatfield WSC**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 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 positive monthly sample | 0 | 0 | 0 | N | Naturally present in the environment |

**Total Coliform** REPORTED MONTHLY TESTS FOUND NO COLIFORM BACTERIA.

**Fecal Coliform** REPORTED MONTHLY TESTS FOUND NO FECAL COLIFORM.

**Turbidity from – City of Corsicana PWS ID # TX1750002**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Turbidity** | **Limit (Treatment Technique)** | **Level Detected** | **Violation** | **Likely Source of Contamination** |
| Highest Single Measurement | 1 NTU | 0.28 NTU | N | Soil Runoff |
| Lowest monthly % meeting limit | 0.3 NTU | 100% | N | Soil Runoff |

Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, diarrhea, and associated headaches. Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration.

**Regulated Contaminants from – City of Corsicana PWS ID # TX1750002**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Inorganic**  **Contaminants** | **Collection**  **Date** | **Highest**  **Level or Average**  **Detected** | **Range of Individual Samples** | **MCLG** | **MCL** | **Units** | **Violation** | **Likely Source of Contamination** |
| Arsenic | 2017 | 2 | 0 – 1.9 | 0 | 10 | ppb | N | Erosion of natural deposits; Runoff from orchards; runoff from glass and electronics production wastes. |
| Barium | 2017 | 0.044 | .044 -.044 | 2 | 2 | ppm | N | Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits. |
| Chromium | 2017 | 1 | 0 - 1 | 100 | 100 | ppb | N | Discharge from steel and pulp mills; Erosion of natural deposits |
| Cyanide | 2017 | 88.2 | 0 – 88.2 | 200 | 200 | ppb | N | Discharge from plastic and fertilizer factories; Discharge from steel/metal factories. |
| Fluoride | 2017 | 0.6 | .571 – 0.607 | 4 | 4.0 | ppm | N | Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum plants. |

**Regulated Contaminants from – City of Corsicana PWS ID # TX1750002**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Radioactive**  **Contaminants** | **Collection Date** | **Highest Level or**  **Average Detected** | **Range**  **of Individual**  **Samples** | **MCLG** | **MCL** | **Units** | **Violation** | **Likely Source of Contamination** |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Combined Radium 226/228 | 2017 | 1.5 | 1.5 – 1.5 | 0 | 5 | pCi/L | N | Erosion of natural deposits |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Synthetic organic contaminants including pesticides and herbicides** | **Collection Date** | **Highest Level Detected** | **Range of Levels Detected** | **MCLG** | **MCL** | **Units** | **Violation** | **Likely Source of Contamination** |
| Atrazine | 6/14/2017 | 1 | 0 – 0.6 | 3 | 3 | ppb | N | Runoff from herbicide  used on row crops. |
| Metolachlor | 6/14/2017 | 0.4 | 0 – 0.4 | N/A | N/A | ppb |  |  |

**Detected Regulated Contaminants from – City of Corsicana PWS ID # TX1750002**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **VOC’s** | **Detected Quantity** | **MC/L** | **Date Collected** | **Analytical Method** |
| Acetone | 0 – 10.7 ug/l | N/A | 7/26/2017 | E524.2 GC/MS |
| 2-Butatone | 0 – 1.22 ug/l | N/A | 7/27/2017 | E524.2 GC/MS |
| Cholroform | 23.3 – 32.7 ug/l | N/A | 7/26/17 – 7/27/17 | E524.2 GC/MS |
| Bromodichloromethane | 10.3 – 17.0 ug/l | N/A | 7/26/17 – 7/27/17 | E524.2 GC/MS |
| Dibromochloromethane | 1.8 – 8.15 ug/l | N/A | 7/26/17 – 7/27/17 | E524.2 GC/MS |
| Methyl Ethyl Ketone | 1.22 – 1.43 ug/l | N/A | 7/26/17 – 7/27/17 | E524.2 GC/MS |
| **Inorganics** |  |  |  |  |
| Chloride | 12.5 – 13.6 mg/l | 300 mg/l | 1/17/17 & 7/27/17 | E300.0 Anions |
| Fluoride | 0.571 – 0.607 mg/l | 4.0 mg/l | 1/17/17 & 7/27/17 | E300.0 Anions |
| Nitrate (as N) | 0.0263 – 0.0431 mg/l | 10.0 mg/l | 1/17/17 & 7/27/17 | E300.0 Anions |
| Sulfate | 42.3 – 58.0 mg/l | 300 mg/l | 1/17/17 & 7/27/17 | E300.0 Anions |
| **Total Dissolved Solids** | 167 - 249 mg/l | 1000 mg/l | 1/17/17 & 7/27/17 | SM2540C |
| **Inorganics**  **Metals Trace Elements** |  |  |  |  |
| Calcium Total | 34.1 – 36.1 mg/l | N/A | 1/17/17 & 7/26/17 | E200.7 Metals, Trace |
| Magnesium Total | 2.62 – 4.56 mg/l | N/A | 1/17/17 & 7/26/17 | E200.7 Metals, Trace |
| Potassium Total | 3.86 – 4.17 mg/l | N/A | 1/17/17 & 7/26/17 | E200.7 Metals, Trace |
| Sodium Total | 16.7 – 20.1 mg/l | 20,000 mg/l | 1/17/17 & 7/26/17 | E200.7 Metals, Trace |
| **E200.8 ICP-MS** |  |  |  |  |
| Aluminum Total | 0.023 – 0.048 mg/l | .2 mg/l | 1/17/17 & 7/27/17 | E200.8 IC-MS |
| Arsenic Total | 0 – 0.0019 mg/l | 0.01 mg/l | 7/27/2017 | E200.8 IC-MS |
| Barium Total | 0.044 mg/l | 2.0 mg/l | 1/17/17 & 7/27/17 | E200.8 IC-MS |
| Chromium Total | 0.00083 – 0.001 mg/l | 0.1 mg/l | 1/17/17 & 7/27/17 | E200.8 IC-MS |
| Copper Total | 0.0011 – 0.0015 mg/l | 1.3 mg/l AL | 1/17/17 & 7/27/17 | E200.8 IC-MS |
| Manganese Total | 0.00023 – 0.0041 mg/l | .05 mg/l | 1/17/17 & 7/27/17 | E200.8 IC-MS |
| Nickel Total | 0.0013 mg/l | .1 mg/l | 7/27/2017 | E200.8 IC-MS |
| **E355.4 CN** |  |  |  |  |
| Cyanide | 0.0882 - <0.0200 mg/l | 0.2 mg/l | 1/17/17 & 7/27/17 | E355.4 CN |

*Chatfield WSC offers a Round-Up Scholarship Program. Please call the office at (903) 345-3463 to become a contributor. Your monthly water bill will be rounded up to the nearest dollar and placed into the scholarship account. At the Annual Membership Meeting the graduating seniors that reside on our system and who are selected by the scholarship committee will be awarded scholarship(s). Since this is a round up system the largest monthly contribution possible would be $0.99.*