Annual Drinking Water Quality Report

EUREKA

IL2030200

Annual Water Quality Report for the period of January 1 to December 31, 2018

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.

The source of drinking water used by EUREKA is Ground Water

For more information regarding this report contact:

Mame (3051) 467-2700

Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo ó hable con alguien que lo entienda bien.

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 nolude:

- notice 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, productions 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.

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.

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).

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

ttp://www.epa.gov/safewater/lead.

| WELL 6 (31415) | WELL 5 (31414) | Source Water Name |
|--|----------------|-------------------|
| LOCALLY WELL2 | LOCALLY WELL 1 | |
| GW | GW | Type of Water |
| The second secon | | Report Status |
| | | Location |

Source Water Information

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Source Water Assessment

We want our valued customers to be informed about their water quality. If you would like to learn more, please feel welcome to attend any of our regularly scheduled meetings. The source water assessment for our supply has been completed by the Illinois EPA. If you would like a copy of this information, please stop by City Hall or call our water operator at (20) 4(10) To view a summary version of the completed Source Water Assessments, including: Importance of Source Water, Susceptibility to Contamination, and documentation/recommendation of Source Water Protection Efforts, you may access the Illinois EPA website at http://www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl.

ground petroleum storages, one below ground petroleum storage, and one unidentified waste site. The Illinois EPA has determined that Eureka's wells \$5 and #6 are not susceptible to contamination. This determination is based on a number of criteria including: monitoring conducted at the wells; monitoring conducted at the entry point to the distribution system; and the available hydrogeologic data for the wells. In anticipation of the U.S. EPA's proposed Ground Water aquifer systems as sensitive. Water systems utilizing these aquifer types would be required to perform routine source water monitoring. Because the facility's wells are constructed in a confined aquifer, which should provide an adequate degree of protection to prevent the movement of pathogens into the a hydrogeologic barrier that restricts pathogen movement, all potential routes and sanitary defects have been mitigated such that the source water is adequately protected, monitoring data did not indicate a history of disease outbreak, and the sanitary survey of the water supply did not indicate a viral contamination threat. However, having stated this, the U.S. EPA is proposing to require States to identify systems in karst, gravel, and fractured bedrock Source of Water: EUREKATO determine Eureka's susceptibility to groundwater contamination, a Well Site Survey, published in 1990 by the Illinois EPA, and the Source Water Protection Program completed by the City of Eureka, were reviewed. Based on the information contained in this document, there are 5 potential sources of groundwater contamination that could pose a hazard to the groundwater pumped by the Eureka community water supply wells. These include 3 above wells, well hydraulics were not considered to be a significant factor in the vulnerability determination. the following criteria during the Vulnerability Waiver Process: the wells are properly constructed with sound integrity and proper site conditions, there is Rule, the Illinois EPA has determined that Eureka's water supply is not vulnerable to viral contamination. This determination is based upon the evaluation of

Lead and Copper

Definitions:

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

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

| wead and Copper | Date Sampled | MCLG | Action Level (AL) | 90th Percentile | # Sites Over AL | Units | Violation | Likely Source of Contamination |
|-----------------|--------------|------|-------------------|--------------------|--------------------|-------|-----------|---|
| Copper | 08/25/2017 | 1.3 | 1.3 | 0.75 | 0 | wđđ | м | Rrosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems. |
| Lead | 08/25/2017 | 0 | 15 | 6.7 | N | ਧਰੰਹੰ | N | Corrosion of household plumbing systems; Erosion of natural deposits. |

Water Quality Test Results

Avg: Level 1 Assessment: Definitions: The following tables contain scientific terms and measures, some of which may require explanation. total coliform bacteria have been found in our water system. Regulatory compliance with some MCLs are based on running annual average of monthly samples. A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why

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

Level 2 Assessment:

Maximum Contaminant Level or MCL:

system on multiple occasions.

The highest level of a contaminant that is allowed in drinking water. MCIs are set as close to the MCIGs as feasible using the best available treatment technology.

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. MCIGs allow for a margin of safety.

Maximum residual disinfectant level goal or MRDLG: Maximum residual disinfectant level or 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.

The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDIGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

not applicable.

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

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

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mrem: na:

Water Quality Test Results

: mdd

Treatment Technique or TT:

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

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A required process intended to reduce the level of a contaminant in drinking water.

Regulated Contaminants

| Gross alpha excluding 01/14/2015 radon and uranium | Combined Radium 01/14/2015 226/228 | Radioactive Collection H: Contaminants Date | Sodium 01/04/2017 | Nitrate (measured as 2018 Nitrogen) | 01/04/2017 | Fluoride 01/04/2017 | Barium 01/04/2017 | Arsenic 01/04/2017 | Inorganic Collection H: Contaminants Date | Total Trihalomethanes 2018 (TTHM) | Chlorine 12/31/2018 | Disinfectants and Collection Housinfection By- Products Date |
|--|---------------------------------------|--|--|--|--|--|---|---|--|--|--|--|
| 0.234 | 1.015 | Highest Level Detected | 84 | 0.24 | 0.023 | 0.672 | 0.01 | 2.4 | Highest Level I Detected | 14 | 2.5 | Highest Level Detected |
| 0.234 - 0.234 | 1.015 - 1.015 | Range of Levels Detected | 84 - 84 | 0.24 - 0.24 | 0.023 - 0.023 | 0.672 - 0.672 | 0.01 - 0.01 | 2.4 - 2.4 | Range of Levels Detected | 13.7 - 13.7 | Ν Ι ω | Range of Levels Detected |
| 0 | 0 | MCIG | | 10 | | 4 | 2 | 0 | MCIG | No goal for the total | MRDIG = 4 | MCLG |
| Ω | 5 | MCL | | 10 | 1.0 | 4.0 | N | 10 | MCL | 80 | MRDL = 4 | MCI |
| рсі/L | pci/L | Units | ppm | mđđ | mdđ | ppm | mđđ | वविव | Units | qđđ | mđđ | Units |
| N | , N | Violation | И | М | N | N | N | N | Violation | N | Я | Violation |
| Erosion of natural deposits. | Erosion of natural deposits. | Likely Source of Contamination | Erosion from naturally occuring deposits. Used in water softener regeneration. | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits. | This contaminant is not currently regulated by the USEPA. However, the state regulates. Exosion of natural deposits. | Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories. | Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits. | Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes. | Likely Source of Contamination | By-product of drinking water disinfection. | Water additive used to control microbes. | Likely Source of Contamination |