**ANNUAL DRINKING WATER QUALITY REPORT**

WINCHESTER

IL1710350

Annual Water Quality Report for the period of January 1 to December 31, 2023

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 WINCHESTER is Ground Water.

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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. In some cases, the water may dissolve radioactive material. Water can also 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 system, agricultural livestock operations and wildlife;
* Inorganic contaminants, such as salts and metals, which may be naturally occurring or result from urban stormwater 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 stormwater runoff and residential uses;
* Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and may also come from gas stations, urban stormwater runoff and septic systems; and
* Radioactive contaminants, which may 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 regulations that 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.

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 USEPAs Safe Drinking Water Hotline (1-800-426-4791).

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. USEPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the USEPA’s Safe Drinking Water Hotline (1-800-426-4791).

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

**Source Water Information**

|  |  |  |  |
| --- | --- | --- | --- |
| **Source Water Name** | **Type of Water** | **Report Status** | **Location** |
| SMG Water Coop | Surface Water | Emergency | Scott County |
| Well 101 | Ground Water | Active | Scott County |
| Well 103 | Ground Water | Active | Scott County |

**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 1-217-742-3191. To view a summary version of the completed Source Water Assessments, including: Importance of Source Waters, Susceptibility to Contamination Determination, 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.

To determine Winchester’s susceptibility to contamination, the following document was reviewed: a Well Site Survey, published in 1995 by the Illinois EPA. Based on the information obtained in this document there is one potential source of groundwater contamination that could pose a hazard to groundwater utilized by Winchester’s community water supply wells. This potential source is an active gravel pit. In addition, information provided by the Leaking Underground Storage Tank and Remedial Project Management Sections of the Illinois EPA indicated additional sites with on-going remediation which may be of concern. Based upon this information, the Illinois EPA has determined that the Winchester Community Water Supply’s source water is susceptible to contamination. The land use within the recharge areas of the wells was analyzed as part of this susceptibility determination. This land use includes agricultural properties.

**2023 Regulated Contaminants Detected**

**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. 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.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Lead and Copper** | **Date Sampled** | **MCLG** | **Action Level**  **(AL)** | **90th**  **Percentile** | **# Sites Over**  **AL** | **Units** | **Violation** | **Likely Source of Contamination** |
| Lead | 2023 | 0 | 15 | 5.13 | 0 | ppb | No | Corrosion of household plumbing systems; Erosion of natural deposits. |
| Copper | 2023 | 1.3 | 1.3 | 0.814 | 0 | ppm | No | Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing systems. |

**Water Quality Test Results**

Definitions:

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 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 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.

Maximum Residual Disinfectant Level (MRDL): The highest level of a drinking water 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 the 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.

**Regulated Contaminants**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Disinfectants and**  **Disinfection Byproducts** | **Collection**  **Date** | **Highest**  **Level**  **Detected** | **Range of Levels**  **Detected** | **MCLG** | **MCL** | **Units** | **Violation** | **Likely Source of Contamination** |
| Chlorine | 2023 | 1.1 | 0.68 – 1.1 | MRDLG = 4 | MRDL = 4 | ppm | No | Water additive used to control microbes. |
| Haloacetic Acids (HAA5) | 2023 | 5 | 5 – 5 | n/a | 60 | ppb | No | Byproduct of drinking water chlorination. |
| Total Trihalomethanes (TTHM) | 2023 | 20 | 19.8 – 19.8 | n/a | 80 | ppb | No | Byproduct of drinking water chlorination. |
| **Inorganic Contaminants** | **Collection**  **Date** | **Highest**  **Level**  **Detected** | **Range of Levels**  **Detected** | **MCLG** | **MCL** | **Units** | **Violation** | **Likely Source of Contamination** |
| Barium | 2023 | 0.0467 | 0.0467 – 0.0467 | 2 | 2 | ppm | No | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits. |
| Fluoride | 2023 | 0.47 | 0.47 – 0.47 | 4.0 | 4.0 | ppm | No | Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories. |
| Nitrate [measured as Nitrogen] - Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age.  High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider. | 2023 | 9 | 4.49 – 8.93 | 10 | 10 | ppm | No | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits. |
| Selenium | 2023 | 9.37 | 9.37 – 9.37 | 50 | 50 | ppb | No | Discharge from petroleum and metal refineries; Erosion of natural deposits; discharge from mines |
| Sodium | 2023 | 9.11 | 9.11 – 9.11 |  |  | ppm | No | Erosion from naturally occurring deposits; used in water softener regeneration. |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Radioactive Contaminants** | **Collection**  **Date** | **Highest**  **Level**  **Detected** | **Range of Levels**  **Detected** | **MCLG** | **MCL** | **Units** | **Violation** | **Likely Source of Contamination** |
| Combined Radium 226/228 | 02/02/2021 | 0.61 | 0.61 – 0.61 | 0 | 5 | pCi/L | No | Erosion of natural deposits. |
| Gross alpha excluding radon and uranium | 02/02/2021 | 2.8 | 2.8 – 2.8 | 0 | 15 | pCi/L | No | Erosion of natural deposits. |

**Violations Table**

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| --- | --- | --- | --- |
| **Consumer Confidence Rule** | | | |
| The Consumer Confidence Rule requires the water delivered by community water systems to prepare and provide to their customers annual consumer confidence reports on the quality of drinking water delivered by the system. | | | |
| **Violation Type** | **Violation Begin** | **Violation End** | **Violation Explanation** |
| CCR Report | 07/01/2023 | 08/01/2023 | We failed to provide to you, our drinking water customers, an annual report that informs you about the quality of our drinking water and characterizes the risks from exposure to contaminants detected in our drinking water. |

Abbreviations:

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

n/a: not applicable

ppb: parts per billion or micrograms per liter (µg/L)

ppm: parts per million or milligrams per liter (mg/L)

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

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

Note: Some contaminants are sampled less frequently than once a year; as a result, not all contaminants were sampled during the CCR calendar year. If any of these contaminants were detected the last time they were sampled for, they are included in the table along with the date that the detection occurred.

Note: This report includes raw, finished and distribution water sample results.

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