# Annual Drinking Water Quality Report for PERU IL0990850 for the period of January 1 to December 31, 2024

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.

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

The source of drinking water used by PERU is Ground Water

For more information regarding this report contact: Don Kowalczyk at 815-224-1650 or The City of Peru at 815-223-0061

**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.

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).

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. The drinking water supplier is responsible for providing high quality drinking water and removing lead pipes, but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk.

Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standard Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water, you may wish to have your water tested, contact at Don Kowalczyk at 815-224-1650.

Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at http ://www.epa.gov/safewater/lead.

| Source Water Name | Type of Water | Report Status | Location |
|---|---|---|---|
| WELL 5 (11507) | GW | | OILL SEC20 T33N R1E 400S 1000W NEC |
| WELL 6 (11508) | GW | | WTRL SEC16 T33N R1E 530N 340E SWC |

| | | |
|---|---|---|
| WELL 7 (11509) | GW | OILL SEC21 T33N R1E 200S 200E NWC |
| WELL 8 (11510) | GW | WTRL SEC8 T33N R1E NEQ |
| WELL 9 (01593) | GW | 800 FT SE OF WELL 8 |

**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 815-224-1650. To view a summary version of the completed Source Water Assessments, including: Importance of Source Water; 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.

Source of Water: PERU To determine Peru's susceptibility to groundwater contamination, information obtained during a Well Site Survey performed by the Illinois Rural Water Association on March 17, 1999 was reviewed. Based on this information, 26 potential sources of contamination were identified within proximity of this water supply's wells. The Illinois EPA does not consider the city's source water 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 on the wells. In anticipation of the U.S. EPA's proposed Ground Water Rule, the Illinois EPA has determined that the water supply is not vulnerable to viral contamination. This determination is based upon the completed evaluation of the following criteria during the Vulnerability Waiver Process: the community's wells are properly constructed with sound integrity and proper site conditions; a hydrogeologic barrier exists that should prevent 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 a sanitary survey of the water supply did not indicate a viral contamination threat. Because the community's wells are constructed in a confined aquifer, which should minimize the movement of pathogens into the wells, well hydraulics were not considered to be a significant factor in the vulnerability determination. Hence, well hydraulics were not evaluated for this groundwater supply.

**2024 Regulated Contaminants Detected**

**Lead and Copper**

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

Copper Range: 56.5 ppb to 1,220 ppb
Lead Range: 5 ppb to 7.55 ppb

To obtain a copy of the system's lead tap sampling data: The lead sampling data is available on Illinois EPA's Drinking Water Watch https://water.epa.state.il.us/dww/index.jsp

Our Community Water Supply has developed a service line material inventory.
To obtain a copy of the system's service line inventory: Don Kowalczyk at 815-224-1650

| Lead and Copper | Date Sampled | MCLG | Action Level (AL) | 90th Percentile | # Sites Over AL | Units | Violation | Likely Source of Contamination |
|---|---|---|---|---|---|---|---|---|
| Copper | 09/19/2022 | 1.3 | 1.3 | 0.961 | 0 | ppm | N | Corrosion of household plumbing systems; Errosion of natural deposits. |
| Lead | 09/19/2022 | 0 | 15 | 5 | 0 | ppb | N | Corrosion of household plumbing systems; Errosion of natural deposits. |

Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure

Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

**Water Quality Test Results**

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

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

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.

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.

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.

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.

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 microbial contaminants.

na: not applicable.

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.

ppm: milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.
Treatment Technique or TT: A required process intended to reduce the level of a contaminant in drinking water.

**Regulated Contaminants**

| **Disinfectants and Disinfection By-Products** | **Collection Date** | **Highest Level Detected** | **Range of Levels Detected** | **MCLG** | **MCL** | **Units** | **Violation** | **Likely Source of Contamination** |
|---|---|---|---|---|---|---|---|---|
| Chlorine | 2024 | 1.3 | 1 - 2 | MRDLG = 4 | MRDL = 4 | ppm | N | Water additive used to control microbes. |
| Haloacetic Acids (HAA5) | 2024 | 3 | 1.87 - 3.47 | No goal for the total | 60 | ppb | N | By-product of drinking water disinfection. |
| Total Trihalomethanes (TTHM) | 2024 | 35 | 14.7 - 34.6 | No goal for the total | 80 | ppb | N | By-product of drinking water disinfection. |
| **Inorganic Contaminants** | **Collection Date** | **Highest Level Detected** | **Range of Levels Detected** | **MCLG** | **MCL** | **Units** | **Violation** | **Likely Source of Contamination** |
| Arsenic | 01/30/2023 | 5 | 5 - 5 | 0 | 10 | ppb | N | Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes. |
| Barium | 01/30/2023 | 0.0101 | 0.0101 - 0.0101 | 2 | 2 | ppm | N | Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits. |
| Chromium | 01/30/2023 | 5 | 5 - 5 | 100 | 100 | ppb | N | Discharge from steel and pulp mills; Erosion of natural deposits. |
| Fluoride | 01/30/2023 | 0.951 | 0.951 - 0.951 | 4 | 4.0 | ppm | N | Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories. |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Manganese | 01/30/2023 | 5 | 5 - 5 | 150 | 150 | ppb | N | This contaminant is not currently regulated by the USEPA. However, the state regulates.<br>Erosion of natural deposits. |
| Nitrate [measured as Nitrogen] | 2024 | 0.469 | 0.469 - 0.469 | 10 | 10 | ppm | N | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits. |
| Sodium | 01/30/2023 | 24000 | 24000 - 24000 | | | ppb | N | Erosion from naturally occuring deposits. Used in water softener regeneration. |
| **Radioactive Contaminants** | **Collection Date** | **Highest Level Detected** | **Range of Levels Detected** | **MCLG** | **MCL** | **Units** | **Violation** | **Likely Source of Contamination** |
| Combined Radium 226/228 | 2024 | 3 | 3.1 - 3.1 | 0 | 5 | pCi/L | N | Erosion of natural deposits. |
| Gross alpha excluding radon and uranium | 2024 | 5 | 4.78 - 4.78 | 0 | 15 | pCi/L | N | Erosion of natural deposits. |