Central City Water Works
Water Quality Report for year 2024

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Meetings: Water Office
Meeting Dates: 2nd Monday of each Month
Meeting Time: 4:00 PM

This report is designed to inform the public about the quality of water and services provided daily. Our commitment is to provide our customers with a safe, clean, and reliable supply of drinking water. We want to assure that we will continue to monitor, improve, and protect the water system and deliver a high-quality product. Water is the most indispensable product in every home, and we ask everyone to be conservative and help us in our efforts to protect the water source and the water system.
Central City treats water from the Green River. The source water assessment for the system is contained in the Muhlenberg County Water Supply Plan prepared by the Pennyrile Area Development District. The area upstream contains residential, agricultural, and mining activities. The source water assessment identified 246 potential sources of contamination with 208 of those sites identified as moderate risk. However, several sites were identified as high risk. There are twenty-five oil/gas wells and ten landfills which present the possibility of contamination from leaching, siltation, and illegal dumping. There are ten underground/aboveground storage tank facilities and three auto repair facilities which have the potential for contamination due to leaking petroleum containers and spills. Other potential concerns within the watershed are roads, bridges and highways which pose a risk due to the possibility of hazardous materials entering the water supply from traffic accidents, spills, and illegal dumping. Copies of the plan are available at the Central City Water Department.

Drinking water, includes bottle water, may reasonably be expected to contain at least small amounts of contaminants. The presence does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects may be obtained by calling the Environment Protection Agency' Safe Drinking Water hotline (800-426-4791).

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 may 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, (sewage plants, septic systems, livestock operations, or wildlife). Inorganic contaminants, such as salts and metals, (naturally occurring or from stormwater runoff, wastewater discharge, oil and gas productions, mining, or farming). Pesticides and herbicides, (stormwater runoff, agricultures, or residential uses). Organic chemical contaminants, including synthetic and volatile organic chemicals, (by-products of industrial processes and petroleum production from gas stations, stormwater runoff or septic systems). Radioactive contaminants, (naturally occurring or from oil and gas productions or mining activities).
In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the number of certain contaminants in water provide by public water systems. FDA regulations establish limits for contaminants in bottle water to provide the same protection for public health.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-comprised 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. Your local water system 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 Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact your local water system. 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.

We are required to annually provide information about health risks from lead in drinking water to schools and child care facilities. All elementary schools, secondary schools, and child care facilities are eligible to be sampled for lead by our water system. Contact our office for scheduling or to learn results of previous sampling.

Service Line Inventory Information:
To address lead in drinking water, EPA requires that all community water systems develop and maintain an inventory of service line materials. We have completed a service line inventory (SLI) and it is available for review at our office.

Lead Samples Results Availability Information:
We are required to periodically sample water from customer taps to determine lead and copper levels. EPA sets the lead action level a 0.015 mg/L (15 ppb). For a water system to be in compliance, at least 90% of tap water samples must have lead levels below this limit. This report contains the 90th percentile and range of our most recent sampling. The individual results for each location sampled can be reviewed at our office.

Some or all of these definitions may be found in this report:

Maximum Contaminant Level (MCL) – the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCGLs as feasible using the best available treatment technology.
Maximum Contaminant Level Goal (MCLG) – the level of a contaminant in drinking water below which there is no known or expected risk to health. MCGLs allow for a margin of safety.
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 microbial contaminants.
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.
Below Detection Level (BDL) – laboratory analysis indicates that the contaminant is not present.
Not Applicable (N/A) – does not apply
Parts per million (ppm) – or milligrams per liter, (mg/l). One part per million corresponds to one minute in two years or a single penny in $10,000
Parts per billion (ppb) – or micrograms per liter, (µg/L). One part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.
Parts per trillion (ppt) – one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in $10,000,000,000.
Parts per quadrillion (ppq) – one part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in $10,000,000,000,000.
Picocuries per litter (pCi/L) – a measure of the radioactivity in water.
Millirems per year (mrem/yr) – measure of radiation absorbed by the body.
Million Fibers per Liter (MFL) – a measure of the presence of asbestos fibers that are longer than 10 micrometers.
Nephelometric Turbidity Unit (NTU) – a measure of the clarity of water. Turbidity has no health effects. However, turbidity can provide a medium for microbial growth. Turbidity is monitored because it is a good indicator of the effectiveness of the filtration system.
Variances & Exemptions (V&E) – State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
Action Level (AL) – the concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system shall follow.
Treatment Technique (TT) – a required process intended to reduce the level of a contaminant in drinking water.

Spanish (Español) – Este informe contiene información muy importante sobre la Calidad de su agua beber. Tradúzcalo o hable con alguien que lo entienda bien.

Regulated Contaminant Test Results			Central City Water Works				
Contaminant [code] (units)	MCL	MCLG	Report Level	Range of Detection	Date of Sample	Violation	Likely Source of Contamination
Inorganic Contaminants							
Barium [1010] (ppm)	2	2	0.024	0.024 to 0.024	Oct-24	No	Drilling wastes; metal refineries; erosion of natural deposits
Fluoride [1025] (ppm)	4	4	0.82	0.82 to 0.82	Oct-24	No	Water additive which promotes strong teeth
Nitrate [1040] (ppm)	10	10	0.887	0.887 to 0.887	Jan-24	No	Fertilizer runoff; leaching from septic tanks, sewage; erosion of natural deposits
Synthetic Organic Contaminants including Pesticides and Herbicides							
Atrazine [2050] (ppb)	3	3	0.7	0.7 to 0.7	Jul-24	No	Runoff from herbicide used on row crops
Disinfectants/Disinfection Byproducts and Precursors							
Total Organic Carbon (ppm) (measured as ppm, but reported as a ratio)	TT*	N/A	1.1 (lowest average)	1.00 to 1.69 (monthly ratios)	2024	No	Naturally present in environment.
*Monthly ratio is the % TOC removal achieved to the % TOC removal required. Annual average must be 1.00 or greater for compliance.							
Chlorine (ppm)	MRDL =4	MRDLG =4	1.38 (highest average)	0.44 to 1.93	2024	No	Water additive used to control microbes.
HAA (ppb) (Stage 2) [Haloacetic acids]	60	N/A	41 (high site average)	21 to 55 (range of individual sites)	2024	No	Byproduct of drinking water disinfection
TTHM (ppb) (Stage 2) [total trihalomethanes]	80	N/A	56 (high site average)	21 to 62 (range of individual sites)	2024	No	Byproduct of drinking water disinfection.
Household Plumbing Contaminants							
Copper (ppm) Round 1 sites exceeding action level 0	AL = 1.3	1.3	0.016 (90^{th} percentile)	0 to 0.049	Jul-22	No	Corrosion of household plumbing systems
Lead (ppb) Round 1 sites exceeding action level 0	AL = 15	0	(90^{th} percentile)	0 to 0	Jul-22		Corrosion of household plumbing systems

Other Constituents					
Turbidity (NTU) TT * Representative samples	Allowable Levels	Highest Single Measurement	Lowest Monthly %	Violation	Likely Source of Turbidity
Turbidity is a measure of the clarity of the water and not a contaminant.	No more than 1 NTU* Less than 0.3 NTU in 95% of monthly samples	0.086	100	No	Soil runoff

	Average	Range of Detection
Fluoride (added for dental health)	0.7	0.66 to 0.86
Sodium (EPA guidance level = 20 mg/L)	10.1	10.1 to 10.1

Secondary contaminants do not have a direct impact on the health of consumers. They are being included to provide additional information about the quality of the water.

Secondary Contaminant	Maximum Allowable Level	Report Level	Range of Detection	Date of Sample
Aluminum	0.05 to 0.2 mg/l	0.06	0.06 to 0.06	Aug-24
Chloride	250 mg/l	19.5	19.5 to 19.5	Aug-24
Fluoride	2.0 mg/l	0.63	0.63 to 0.63	Aug-24
Foaming Agents	0.5 mg/l	0.218	0.218 to 0.218	Aug-24
pH	6.5 to 8.5	7.73	7.73 to 7.73	Aug-24
Sulfate	250 mg/l	21.5	21.5 to 21.5	Aug-24
Total Dissolved Solids	500 mg/l	183	183 to 183	Aug-24

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.