2003 water report

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Consumer Confidence Report

This is your annual report on drinking **water quality.**

What Are Drinking Water Standards?

Under the authority of the Safe Drinking Water Act (SDWA), EPA sets standards for approximately 90 contaminants in drinking water. For each of these contaminants, EPA sets a legal limit, called a maximum contaminant level, or requires a certain treatment. Water suppliers may not provide water that doesn't meet these standards. Water that meets EPA standards is safe to drink.

The Safe Drinking Water Act (SDWA), which celebrated its 25th anniversary in 1999, is the main federal law that ensures the quality of Americans' drinking water. Under SDWA, EPA sets standards for drinking water quality and oversees the states, localities, and water suppliers who implement those standards. The SDWA covers all public water systems with piped water for human consumption with at least 15 service connections or a system that regularly serves at least 25 individuals.

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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by simply calling the EPA's Safe Drinking Water Hotline at (1-800-426-4791).

En Español:

Este informe contiene información muy importante sobre su agua beber. Tradúzcalo ó hable con alguien que lo entienda bien.

Notice: Important Information

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 (1-800-426-4791).

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-occuring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Why do I need to read this?

A survey conducted by the American Water Works Research Foundation in 1993 found that nearly two-thirds of water consumers surveyed said they received "very little" or "no" information on the quality of their water. The water quality reports will increase the availability of information. Informed and involved citizens can be strong allies of water systems, large and small, as they take action on pressing problems. Also, an increase in public awareness can give sensitive sub-populations the information that they need to protect themselves.

Drinking water can come from either ground water sources (via wells) or surface water sources (such as rivers, lakes, and streams). Nationally, most water systems use a ground water source (80%), but most people (66%) are served by a water system that uses surface water. This is because large metropolitan areas tend to rely on surface water, whereas small and rural areas tend to rely on ground water. In addition, 10-20% of people have their own private well for drinking water.

Where can I get **more information?**

Information on water quality in your area is available from several sources, including your local public health department and your water supplier. You can determine whom to contact by checking your water bill or by calling your local town hall. You can also contact your state drinking water program or call EPA's Safe Drinking Water Hotline at 1-800-426-4791. EPA has also prepared a citizen's guide to drinking water called "Water on Tap: A Consumer's Guide to the Nation's Drinking Water."

terminology

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 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, stormwater runoff, and residential uses.

Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.

Radioactive contaminants, which can 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 which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

2003 Annual Drinking Water Quality Report

Peru Utilities

The Water We Drink

Peru Utilities is pleased to present to you the 2003 Annual Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. Peru Utilities is committed to ensuring the quality of your water.

Did You Know?

75% of the human brain is water

75% of a living tree is water

Is My Water Safe?

Peru Utilities is pleased to report that our drinking water meets or exceeds federal and state requirements. If you have any questions about this report or concerning your water utility, please contact Mike Dahlquist, Water/Wastewater Superintendent, at 765-473-7651. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled board meetings at 335 East Canal Street, Peru, IN. The meeting dates are announced in the *Peru Tribune* "Upcoming Events" column.

Where Does Our Water Come From?

Many of our customers do not know the answer to this question. The City of Peru lies on the Wabash River, the largest river in Indiana. The Wabash River flows through a deep valley called the Wabash-Maumee Trough which was eroded by flood waters from Glacial Lake Maumee over ten thousand years ago. When flood waters were released from Glacial Lake Maumee, tremendous volumes of water flowed across central Indiana cutting a deep valley into the surficial tills and underlying limestone and bedrock. Before the Wabash-Maumee Trough was cut and before the continental glaciers covered northern Indiana, a great river flowed under central Indiana. This great river, known as the Teays, cut a deep valley into the limestone bedrock that underlies Miami County. Later, during successive periods of continental glaciation, the valley of the Teays carried the sediment-laden meltwaters of the glacial lobes as they underwent cycles of advancement and recession. The large volume of sediment carried by the melt waters was far too great for the waters to carry and slowly the Teays Valley began to fill with sand, gravel and clay. During periods of advancement, the great glacial lobes overpowered the Teays Valley. As the lobes receded, the valley was buried with a mixture of clay, silt and gravel known as glacial till. It was during the last period of continental glaciation that Glacial Lake Maumee formed in east central Indiana from the meltwaters of the receding Erie lobe. The drainage of Lake Maumee was blocked by tongues of ice. When the water rose so high, it escaped and actually flowed over the tongues of ice cutting a deep channel through the Wabash-Maumee Trough. The Wabash-Maumee Trough intersected the buried Teays Valley at the present day site of the City of Peru. The overlying till was eroded by the flood waters and the sand and gravel fill of the Teays was exposed. Peru Utilities has five water wells (four in operation) which are developed in the saturated sand and gravel fill of the Teays Valley. The saturated sand and gravel form an "aquifer". The water of the Teays Valley aquifer comes from rain that has infiltrated into the pore spaces of the sand and gravel and is pumped into our system by our water wells.

Testing Time Period

Peru Utilities routinely monitors for constituents in your drinking water according to Federal and State laws. This table shows the results of our most recent monitoring results. As water travels over the land or underground, it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk.

DEFINITIONS YOU NEED TO KNOW:

In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Non-Detects (ND) - Laboratory analysis indicates that the constituent is not present.

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 - One part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.

Parts per trillion (ppt) or Nanograms per liter (nanograms/l) - 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) or Picograms per liter (picograms/l) - One part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in $10,000,000,000,000.

Maximum Contaminant Level - The "Maximum Allowed" (MCL) is 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 - The "Goal" (MCLG) is 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.

MNR- Monitoring Not Required.

**All other Synthetic Organic Contaminants tested for were found to be Below a Detectable Level.

Lead: Lead in drinking water is rarely the sole cause of lead poisoning, but it can add to a person's total lead exposure. All potential sources of lead in the household should be identified and removed, replaced or reduced.

Arsenic: Peru Utilities tested for Arsenic in 2001 even though we were not required to test for it. The arsenic in our water was found to be below the detection level.

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Conclusion: Peru Utilities' employees work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future. If you have any questions or require further assistance please contact Mike Dahlquist, Water/Wastewater Superintendent, at 765-473-7651 or visit our web site at www.peruutilities.com.

Test Results Peru Utilities

Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Microbiological Contaminants						
Total Coliform Bacteria 10 Required Samples taken per Month	N	-	-	0	Presence of coliform bacteria in 5% of monthly samples	Naturally present in the environment
Inorganic Contaminants						
Fluoride	N	1.1	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (as Nitrogen)	N	1.25	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Barium	N	.103	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Sodium	N	10.7	ppm	N/A	N/A	-
Synthetic Organic Contaminants including Pesticides and Herbicides (EPA Non-Regulated)						
Bromodichloromethane	N	14	ppb	N/A	N/A	-
Chloroform	N	13	ppb	N/A	N/A	-
Dibromochloromethane	N	11	ppb	N/A	N/A	-
Di(2-ethylhexyl)Phthalate (Regulated)	N	BDL	ppb	-	6	Discharge from rubber and chemical factories
Volatile Organic Contaminants						
TTHM [Total trihalomethanes]	N	21.25	ppb	0	100	By-product of drinking water chlorination
Bromodichloromethane	N	6.02	ppb		N/A	
Bromoform	N	3.86	ppb		N/A	
Dibromochloromethane	N	7.13	ppb		N/A	
Chloroform	N	4.11	ppb		N/A	
Radioactive Contaminants						
Gross Beta	N	5.00	pCi/l	-	50 (pCi/L)*	Decay of natural and man-made deposits of certain minerals that are radioactive and may emit forms of radiation known as photons and beta radiation
Gross Alpha	N	2.4	pCi/l	0	15 (pCi/L)*	Erosion of natural deposits of certain minerals that are radioactive and may emit a form of radiation known as alpha radiation
* picocuries per Liter						
Lead & Copper Results						
Lead	N	.007	mg/l	-	.015	Corrosion of household plumbing systems; erosion of natural deposits
Copper	N	.136	mg/l	-	1.3	Corrosion of household plumbing systems; erosion of natural deposits

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