

Consumer Confidence Report

Annual Drinking Water Quality Report

NORTH PEKIN

IL1790550

Annual Water Quality Report for the period of January 1 to December 31, 2020

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 NORTH PEKIN is Ground Water

For more information regarding this report contact:

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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 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 EPA's 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).

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 Name	Type of Water	Report Status	Location
WELL 2 (50211)	GW	Active	.5MI N OF RT 98 AT GRA PIT S OF V
WELL 3 (01656)	GW	Active	550' S OF RT 29 ON LEVEE, 250' W OF ALLEN ST

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 first Monday of every month 6:00pm at the Village Hall 206 Lincoln Blvd. 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 Village Hall or call our water operator at 309-382-3464. 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: NORTH PEKIN To determine North Pekin's susceptibility to contamination the following information sources were utilized: a 1990 Well Site Survey Report, a field evaluation conducted by the Illinois Rural Water Association, and data supplied by the village. Based upon this information, 24 potential sources of groundwater contamination were noted that could pose a hazard to groundwater utilized by North Pekin's wells. These include three facilities that store petroleum below ground, two improperly abandoned wells, and several other facilities have the potential to handle materials that could pose a risk to groundwater. In addition, Illinois EPA records indicated additional sites with on-going remedial activities, proximate to North Pekin Well #1, that may be of concern. Based upon this information, the Illinois EPA has determined that the North Pekin community water supply's source water is susceptible to contamination. As such, the Illinois EPA has provided 5-year recharge area calculations for the wells. The land use within the recharge area of the wells was analyzed as part of this susceptibility determination. This land use includes residential, industrial, and commercial properties.

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: 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
Copper	08/21/2019	1.3	1.3	0.64	1	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	08/21/2019	0	15	4.4	0	ppb	N	Corrosion of household plumbing systems Erosion of natural deposits.

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 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.

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	12/31/2020	0.6	0.5 - 0.7	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Haloacetic Acids (HAA5)	2020	3	3.2 - 3.2	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2020	13	13.3 - 13.3	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
Barium	2020	0.064	0.064 - 0.064	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	2020	0.554	0.554 - 0.554	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Iron	2020	0.52	0.52 - 0.52		1.0	ppm	N	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion of natural deposits.
Manganese	2020	318	0 - 300	150	150	ppb	N	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion of natural deposits.
Nitrate [measured as Nitrogen]	2020	4	3.5 - 3.9	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Sodium	2020	74	74 - 74			ppm	N	Erosion from naturally occurring deposits. Used in water softener regeneration.
Zinc	2020	0.009	0.009 - 0.009	5	5	ppm	N	This contaminant is not currently regulated by the USEPA. However, the state regulates. Naturally occurring; discharge from metal.

Special Water Quality Information

Dear Water System Customer,

The Illinois Environmental Protection Agency (Illinois EPA) recently tested our water system for compounds known as Per- and Polyfluoroalkyl Substances (PFAS) as part of a statewide investigation of community water supplies. PFAS are a group of thousands of manmade substances that have been produced in the United States since the 1940s and utilized for a variety of applications ranging from water and stain-proofing to firefighting. Some PFAS have been phased out of production due to environmental and human health concerns, yet they persist in the environment and may contaminate surface and ground waters.

Neither the Illinois EPA nor the U.S. EPA have yet developed enforceable drinking water standards for PFAS. In the interim, Illinois EPA has developed health-based Draft Guidance Levels for the small number of PFAS for which there is appropriate information to do so. There is not enough information available to scientists to develop health-based Draft Guidance Levels for most PFAS. Draft Guidance Levels are intended to be protective of all people consuming the water over a lifetime of exposure. It is important to understand that Draft Guidance Levels are not regulatory limits for drinking water. Rather, the Draft Guidance Levels are benchmarks against which sampling results are compared to determine if additional investigation or other response action is necessary.

Illinois EPA testing has compared that levels of PFAS in the analytical results from our water supply to the Guidance Levels and **none of the results exceeded those levels.** Illinois EPA health-based Draft Guidance Levels, as provided in the table below.

PFAS Analyte	Acronym	Draft Guidance Level	Analytical Results (ppt)	
			Sample Collected 2-24/2021	Sample Collected 3/23/2021
Perfluorobutanesulfonic acid	PFBS	0.14 mg/L (140,000 ppt)	ND	ND
Perfluorohexanesulfonic acid	PFHxS	0.00014 mg/L (140 ppt)	11	9.9
Perfluorononanoic acid	PFNA	0.000021 mg/L (21 ppt)	ND	ND
Perfluorooctanesulfonic acid	PFOS	0.000014 mg/L (14 ppt)	ND	ND
Perfluorooctanoic acid	PFOA	0.000000002 mg/L (2 ppt)	ND	ND
Perfluorohexanoic acid	PFHxA	0.00056 mg/L (560,000 ppt)	ND	ND
Hexafluoropropylene oxide dimer acid	HFPO-DA	0.00000056 mg/L (560 ppt)	ND	ND

Sample
Collected by the Village Water Dept.
May 10/2021

Perfluorohexanesulfonic	0.00014 mg/L
Acid	PFHxS (140 ppt) 3.5

Our water may contain other PFAS at concentrations greater than or equal to the minimum reporting levels. However, neither the Illinois EPA nor the U.S. EPA currently have Draft Guidance Levels for these additional compounds.

PFAS are present in many consumer goods, including food packaging and personal care products, and scientists have found values of PFAS in blood of nearly all individuals tested. Exposure to high levels of PFAS may cause adverse health effects such as increased cholesterol levels, increased risk for thyroid disease, low infant birth weights, reduced response to vaccines, pregnancy-induced hypertension and increased risk of liver and kidney cancer as seen in studies of laboratory animals. Exposure to PFAS above the recommended Draft Guidance Levels does not guarantee that a person will get sick or an adverse health effect will occur. Draft Guidance Levels are conservative estimates. The possible health effects from PFAS are dependent on how much a person is exposed to and how long they are exposed to it. Exposure to PFAS above recommended Draft Guidance Levels for periods of time may mean that a person is at a greater risk of experiencing these adverse effects.

The Village has taken measures to respond to the results of this testing. As a proactive measure(s) to protect our drinking water supply, the Village is working to:

- continue to monitor PFAS values through quarterly sampling
- test and identify which water source intake/well is affected
- begin evaluating treatment options and developing a plan to reduce PFAS in potable water

Based on these initial results, the Village will perform additional sampling in May 2021 and will keep the community updated and informed.

Additional information regarding PFAS, the statewide PFAS investigation network, and the impact to public health can be found in the attached fact sheet as well as on the Illinois EPA PFAS webpage: <https://www2.illinois.gov/epa/topics/water-quality/pfas/Pages/default.aspx>. The confirmed sampling results for the Village are also available on Illinois EPA's Drinking Water Watch system at <http://water.epa.state.il.us/dww/index.jsp>.

If you have questions, please contact: North Pekin Superintendent of Public Works Frank Hardy at 309-382-3464

or the EPA at:

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Barb Lieberoff, Office of Community Relations
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What are PFAS?

Per- and poly-fluoroalkyl substances are a group of thousands of chemicals collectively known as PFAS. Since the 1940s, PFAS have been used in manufacturing, firefighting, water- and oil-resistant products, and many consumer products such as carpet, clothing, cosmetics, and food packaging. Two of the most common compounds within this class, perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS), stopped being produced in the United States (U.S.) in the early 2000s, but these compounds may still be present in imported goods.

Most people are exposed to these chemicals from water, food, and consumer products. PFAS are very stable and do not break down easily in the environment. They are often referred to as “forever chemicals.”

What are the potential health concerns associated with PFAS exposure?

Studies indicate that exposures to high levels of PFAS contaminated water over time may cause certain adverse health effects. Exposure to PFAS above the recommended Draft Guidance Levels does not necessarily mean that a person will get sick or an adverse health effect will occur. Research on the health effects associated with PFAS is ongoing.

Scientific studies of laboratory animals, as well as studies on human populations exposed to PFOA and PFOS over periods of time, have shown that exposure to PFOA and PFOS above certain levels may result in adverse effects such as:

- increased cholesterol levels
- changes in liver enzymes
- decreased response to vaccines in children
- increased risk of high blood pressure or pre-eclampsia in pregnant women
- small decreases in infant birth weight
- increased risk of kidney or testicular cancer

If you have specific health concerns, please consult your health care professional.

What should you do if PFAS have been detected in your drinking water?

Exposure to PFAS in drinking water can be minimized by

- using bottled water that has been tested for PFAS for drinking, cooking, and preparing infant formula.
- installing filters or treatment systems certified by American National Standards Institute (ANSI) or NSF International for the reduction of PFOA and PFOS. A searchable list is available here: <http://info.nsf.org/Certified/DWTU/>.

Boiling water does not destroy PFAS.

There are no adverse effects from using your water for bathing and showering as PFAS is not easily absorbed into the skin.

Background

The United States Environmental Protection Agency (U.S. EPA) evaluates the presence of emerging and unregulated contaminants in community water supplies on a national basis pursuant to the Unregulated Contaminant Monitoring Rule (UCMR). U.S. EPA uses the data collected from these sample results to establish new drinking water standards known as maximum contaminant levels or MCLs. Traditionally, U.S. EPA develops MCLs that are then adopted by the states and used to determine if additional actions are needed to respond to contaminant concerns in drinking water. U.S. EPA has started the regulatory process for listing MCLs for PFOA and PFOS.

In 2016, U.S. EPA adopted a Lifetime Health Advisory for PFOA and PFOS of 70 parts per trillion (ppt), both individually and combined when both are present. This is a non-enforceable value intended to provide guidance for evaluating unregulated drinking water contaminants.

Given the concern about these unregulated contaminants, Illinois EPA developed health-based Draft Guidance Levels for PFOA, PFOS, and five other PFAS, perfluorobutanesulfonic acid (PFBS), perfluorohexanesulfonic acid (PFHxS), perfluorononanoic acid (PFNA), Perfluorohexanoic acid (PFHxA) and Hexafluoropropylene oxide dimer acid (HFPO-DA) using the procedures from 35 Illinois Administrative Code 620. In 2020, Illinois EPA also initiated a statewide investigation of all community water systems to determine how commonly PFAS can be found in community drinking water supplies. Illinois EPA will compare the analytical results of this testing with the PFAS Draft Guidance Levels to help community water supplies evaluate future actions that may need to be taken. This data will also be used to aid in the development of future regulatory standards in Illinois.

The confirmed sampling results are available on Illinois EPA's Drinking Water Watch system at <http://water.epa.state.il.us/dww/index.jsp>.

Additional Information

Illinois EPA: <https://www2.illinois.gov/epa/topics/water-quality/pfas/Pages/default.aspx>

United States Environmental Protection Agency: <https://www.epa.gov/pfas>

Centers for Disease Control and Prevention: https://www.cdc.gov/biomonitoring/PFAS_FactSheet.html

Agency for Toxic Substance and Disease Registry: <https://www.atsdr.cdc.gov/pfas/index.html>