

Annual Drinking Water Quality Report

IN5254007

LINDEN WATER DEPARTMENT

Annual Water Quality Report for the period of January 1 to December 31, 2019

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.

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LINDEN WATER DEPARTMENT is Ground Water

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

Sources 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.

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.

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.

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.

Contaminants may be found in drinking water that may cause taste, color, or odor problems. These types of problems are not necessarily causes for health concerns. For more information on taste, odor, or color of drinking water, please contact the system's business office.

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>.

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Source Water Information

SWA = Source Water Assessment

Source Water Name	Type of Water	Report Status	Location
WELL #1	GW	_____	_____
WELL #2	GW	_____	_____

2019 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: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

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Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	09/12/2017	1.3	1.3	0.493	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	09/12/2017	0	15	0.9	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.

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.

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.

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.

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 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.

Water Quality Test Results

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	2019	1	1 - 1	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Halacetic Acids (HAA5)	2019	26	17.3 - 31.8	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2019	41	28.3 - 42	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	09/25/2018	0.7	0.7 - 0.7	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	09/25/2018	0.344	0.344 - 0.344	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	09/25/2018	0.8	0.8 - 0.8	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate [measured as Nitrogen]	2019	1	1.1 - 1.1	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks; sewage; Erosion of natural deposits.
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Combined Radium 226/228	11/14/2018	1.7	1.7 - 1.7	0	5	pCi/L	N	Erosion of natural deposits.
Gross alpha excluding radon and uranium	11/14/2018	2	2 - 2	0	15	pCi/L	N	Erosion of natural deposits.

Violations Table

Halooacetic Acids (HAA5)

Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.

Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE (DBP), MAJOR	01/01/2019	03/31/2019	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.
MONITORING, ROUTINE (DBP), MAJOR	10/01/2019	12/31/2019	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

Total Trihalomethanes (TTHM)

Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE (DBP), MAJOR	01/01/2019	03/31/2019	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.
MONITORING, ROUTINE (DBP), MAJOR	10/01/2019	12/31/2019	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

IMPORTANT INFORMATION

The following pages comprise the Annual Consumer Confidence Report (CCR) for your water system.

To download the CCR into your word processing program, follow these steps. Remember you must have the document set up in Landscape Orientation.

- * Choose Select All from the edit drop down MENU. (it will highlight all the information)
- * Choose Edit from the Menu, select Copy from the edit dropdown Menu.
- * Open your word processing program.
- * Choose Edit from the MENU, select Paste from the edit dropdown MENU and the information will transfer.
- * Choose Edit from the Menu.

In order to meet all the requirements of the CCR, you must include the following additional information if it pertains to your water system.

- * The report must include the telephone number of the owner, operator, or designee of the community water system as a source of additional information concerning the report.
- * In communities with a large proportion of non-English speaking residents, as determined by the Primacy Agency, the report must contain information in the appropriate language(s) regarding the importance of the report or contains a telephone number or address where such residents may contact the system to obtain a translated copy of the report and/or assistance in the appropriate language.
- * The report must include information about opportunities for public participation in decisions that may affect the quality of the water (e.g., time and place of regularly scheduled board meetings).
- * If your water system purchases water from another source, you are required to include the current CCR year's Regulated Contaminants Detected table from your source water supply.
- * If your water system had any violations during the current CCR Calendar year, you are required to include an explanation of the corrective action take by the water system.
- * If your water system is going to use the CCR to deliver a Public Notification, you must include the full notice and return a copy of the CCR and Public Notice with the public Notice. This is in addition to the copy and certification form required by the CCR Rule.
- * The information about likely sources of contamination provided in the CCR is generic. Specific information regarding contaminants may be available in sanitary surveys and source water assessments and should be used when available to the operator.
- * If a community water system distributes water to its customers from multiple hydraulically independent distribution systems fed by different raw water sources, the table should contain a separate column for each service area, and the report should identify each separate distribution system. Alternatively, systems may produce separate reports tailored to include data for each service area.

- * Detections of unregulated contaminants for which monitoring is required are not included in the CCR and must be added. When added, the information must include the average and range at which the contaminant was detected.
- * If a water system has performed any monitoring for Cryptosporidium, including monitoring performed to satisfy the requirements of the Information Collection Rule [ICR] (141.143), which indicates that Cryptosporidium may be present in the source water or the finished water, the report must include: (a) a summary of the results of the monitoring; and (b) an explanation of the significance of the results.
- * If a water system has performed any monitoring for radon which indicate that radon may be present in the finished water, the report must include: (a) The results of the monitoring; and (b) An explanation of the significance of the results.
- * If a water system has performed additional monitoring which indicates the presence of other contaminants in the finished water, EPA strongly encourages systems to report any results which may indicate a health concern. To determine if results may indicate a health concern, EPA recommends that systems find out if EPA has proposed an NPDWR or issued a health advisory for that contaminant by calling the Safe Drinking Water Hotline (800-426-4791). EPA considers detects above a proposed MCL or health advisory level to indicate possible health concerns. For such contaminants, EPA recommends that the report include: (a) the results of the monitoring; and (b) an explanation of the significance of the results noting the existence of a health advisory or a proposed regulation.
- * If you are a groundwater system that receives notice from a state of a significant deficiency, you must inform your customers in your CCR report of any significant deficiencies that are not corrected by December 31 of the year covered by it. The CC must include the following information:
 - The nature of the significant deficiency and the date it was identified by the state.
 - If the significant deficiency was not corrected by the end of the calendar year, include information regarding the State-approved plan and schedule for correction, including interim measures, progress to date, and any interim measures completed.
 - If the significant deficiency was corrected by the end of the calendar year, include information regarding how the deficiency was corrected and the date it was corrected.