

New Castle Water Works 2019 Annual Water Quality Report

New Castle Water Works is committed to providing residents with a safe and reliable supply of high-quality drinking water. The laboratories we use to test our water are certified by the State of Indiana and have the most advanced equipment and procedures at their disposal. New Castle Water Works water meets State and Federal standards for both appearance and safety. This annual "Consumer Confidence Report," required by the Safe Drinking Water Act (SDWA), tell you where your water comes from, what our tests shows about it, and other things you should know about drinking water.

We are proud to report that the water provided by the New Castle Water Works meets or exceeds established water-quality standards.

The United States Environmental Protection Agency (EPA) enforces the Safe Drinking Water Act. The EPA mandates compliance through State Agencies.

The New Castle Water Works falls under the directions of the IDEM (Indiana Dept. of Environmental Management). IDEM mandates rules and procedures for testing of water, approval of new water mains, and approval of site for new wells or well fields. They also assist with direction for general operation of public water systems.

New Castle Water Works is a member of the IURC (Indiana Utility Regulatory Commission). The IURC regulates rate concerns for Utilities.

New Castle City Council through the Board of Public Works sets local rules and policies for the New Castle Water Works. A copy of the New Castle Utilities Regulations and Standards Procedures Manual is available for review in our office 201 N. 6th St.

The Board of Public Works who governs the Water Works has created a panel to review concerns between the utility and the customer. The Utility Impact Board meets twice a month: first and third Monday's. Citizens can be put on the agenda by request or come to a meeting and speak.

In addition, New Castle Water Works has a well-head protection committee. This committee has prepared a management plan, contingency plan, inventory of potential sources of contamination and delineation information to complete Phase I of this state requirement. This information has been submitted to IDEM and the office of Water Quality has approved Phase I of this program. The goal of this committee is to protect the ground water supply for future generations.

Overview

New Castle Water Works provides service to 6584 active residential connections that serve approximately 19,675 people. We also provide water service to 910 commercial connections and 21 industrial connections for a total of 7515 active connections. We have and enforce a very rigid Backflow Program to assure that the chance of our water system becoming contaminated from a cross connection from one of our non-residential customers is kept to a minimum.

Our staff maintains water mains and services throughout New Castle, as well as sub-divisions on the outer edge of the city. During 2018, we responded to 4935 service calls to provide services such as turning water on or off, checking for leaks, checking and testing meters, etc. Our plumbing crew repaired 39 water main breaks, repaired or replaced 10 existing service lines. We also added 9 new service connections to our water distribution system in 2018.

In addition, we also provide water service to 734 fire hydrants throughout New Castle, Henry Township and Prairie Township and Franklin Township for fire protection.

Water Source

New Castle Water Works is supplied by ground water pumped from 13 wells, located in the Big Blue River Flood Plain, in and north of New Castle.

We draw water from an aquifer at depths of 90 to 120 feet and constantly monitor this aquifer and it continues to provide an adequate source of high-quality water.

Our first treatment process is aeration (to bring water in contact with air). We then move the water through eight pressure filters capable of treating 1,000,000 gallons each per day. These are designed for iron and mineral removal, as ground water is typically very hard. Our average daily production is 2,376,000 gallons per day.

The disinfection process consists of adding chlorine gas that kills disease-causing organisms found naturally in ground water.

Fluoride is also added to reduce the incidence of dental cavities in the children of our customers.

An Explanation of the Water-Quality Data Table

This report is based upon tests conducted in the year 2018 by New Castle Water Works. Terms used in the Water-Quality table and in other parts of this report are defined here.

Maximum Contaminant Level or MCL: The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's 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.

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

Key to Table

AL=Action Level MCL=Maximum Contaminant Level

MCLG=Maximum Contaminant Level Goal

ppm=parts per million, or milligrams per liter (mg/L)

ppb=parts per billion, or micrograms per liter (ug/L)

pCi/l=picocuries per liter

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violations	Likely Source of Contamination
Copper	2018	1.3	1.3	0.12	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2018	0	15	2.9	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violations	Likely Source of Contamination
Chlorine	2018	1	1 - 1	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Haloacetic Acids (HAA5)*	2018	4	0 - 5.8	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2018	19	9.5-32	No goal for the total	80	ppb	N	By-product of drinking water disinfection.