



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
 OFFICE OF DRINKING WATER AND MUNICIPAL ASSISTANCE
**CONSUMER CONFIDENCE REPORT FOR COMMUNITY WATER SUPPLY
 CERTIFICATE OF DISTRIBUTION**

Issued under authority of 1976 PA 399 and Administrative Rules, as amended.
 Failure to submit certification is a violation of the Act and may subject the water supply to enforcement penalties.

Supply Name: <u>City of Watervliet</u>	County: <u>Berrien</u>	WSSN: <u>06930</u>
Population: <input type="checkbox"/> 500 or fewer people	<input checked="" type="checkbox"/> 501 – 9,999 people	<input type="checkbox"/> 10,000 or more people

Community water supplies must confirm that the Consumer Confidence Report (CCR) and any enclosed Public Notices (PN) or notices of CCR availability, have been distributed to customers by July 1 as required under administrative rules R 325.10415 and R 325.10404(4)(c). Supplies must also certify that the information contained in the CCR is correct and consistent with the compliance monitoring data previously submitted to the Michigan Department of Environmental Quality (DEQ). **Return the certification to the appropriate DEQ district office by October 1.** For addresses, visit www.michigan.gov/deg, click on Locations.

Method of delivery to DEQ
 Mail Email Hand Delivery Other Faxed Date delivered: 6.13.18

Method of delivery to Local Health Department
 Mail Email Hand Delivery Other _____ Date delivered: 6.28.18

Method or combination of methods to directly deliver CCR to each bill paying customer. Check all that apply.
 Mail or hand deliver a paper copy of CCR. Date(s) mailed or hand delivered: _____
 Mail or hand deliver notification that the CCR is available at a direct URL. Date(s) delivered to customers: Water Bills
 Email notification that CCR is available at direct URL: Date(s) emailed: _____
 Email notification that CCR is attached to the email. Date(s) emailed: _____
 Email notification that CCR is embedded in the email. Date(s) emailed: _____

- If using notification of CCR availability:
1. Mail a paper CCR to customers who request it and to customers known to be incapable of receiving electronically.
 2. Include a copy of the notification to the DEQ district office with this certification form.
 3. Explain the nature of the notification, prominently display the direct URL, include statement how to request a paper copy.

Example of Notification of CCR Availability Subject Line: 2012 Drinking Water Quality Report Available.
 Message: Your annual report on the source and quality of your drinking water is available on the Web at www.anytown.gov/waterqualityreport. To have a copy mailed to you, contact Anytown at 555-111-1111 or water@anytown.gov.

Option for supplies serving fewer than 10,000 persons: Publish entire report in newspaper, and notify customers via newspaper(s) in which CCR published, mail, email or hand delivery that individual copies will not be mailed, and include statement how to request a paper copy.
 Date(s) of publication: 6.19.2018 Tri-City Record

Option for supplies serving 500 or fewer persons: Notify customers via mail, email, hand delivery or, with DEQ approval, posting in public places, that a copy of the report is available from the water supply on request.
 Date(s) of notification: _____

Post on Internet (required for supplies serving ≥100,000, optional for others)
 Internet address: N/A Date accessible: _____

"Good Faith" efforts to reach non-bill-paying consumers (in addition to the method(s) above). Check all that apply.

Mail the report to all postal patrons. Zip codes and dates mailed: _____
 Mail to each service connection physical address. Date(s) mailed: _____
 Advertise the availability of the report in the newspapers, on TV, and on the radio.
 Publish the report in a local newspaper.
 Post the report in public places such as cafeterias in public buildings, libraries, churches, and schools.
 Deliver multiple copies for distribution by single-bill customers, e.g., apartments or private employers.
 Deliver the report to community organizations.
 Other: Posted in City Hall and on informational sign outside City Hall

Send to the DEQ a copy of the news articles, a list of channels broadcast and dates, and a list of locations/organizations reports delivered to and dates.

A Tier 3 Public Notice is Distributed with this CCR

This CCR is being used to deliver a Tier 3 Public Notice for one or more violations. To use this Tier 3 delivery option, the CCR must be directly delivered to each bill paying customer or, with DEQ approval, continuously posted, and must be issued within 12 months of learning of the violation. A copy of this form must be delivered to the DEQ within 10 days of delivering the CCR to customers to meet the public notification requirements.

Name/Title: Dir Mark Poolin

Signature: _____ Date: 6.28.18

See reverse side for U.S. EPA Expectations for Electronic Delivery of CCR

AFFIDAVIT OF PUBLICATION

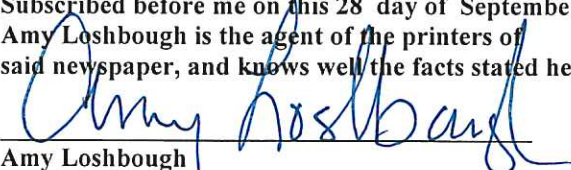
IN THE MATTER OF

STATE OF MICHIGAN
COUNTY OF BERRIEN

Amy Loshbough, being duly sworn, deposes and says
the printed copy of a notice was taken from: the
Tri-City Record, a newspaper printed and
Circulated in, County of Berrien and County of Van Buren
State of Michigan and that said notice was published
1 time in said newspaper. With first insertion being on June 21, 2018
and final insertion being June 21, 2018

Subscribed before me on this 28 day of September, 2018

Amy Loshbough is the agent of the printers of
said newspaper, and knows well the facts stated herein.


Amy Loshbough

Subscribed and sworn to before me
this 28 day of September, 2018

2017 Water Quality Report for CITY OF WATERVLIET

This report covers the drinking water quality for CITY OF WATERVLIET for the 2017 calendar year. This information is a snapshot of the quality of the water that we provided to you in 2017. Included are details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards.

Your water comes from 3 WELLS groundwater wells, each over 176 FEET drawing from PAW PAW LAKE watershed. The State performed an assessment of our source water in 2003 to determine the susceptibility or the relative potential of contamination. The susceptibility rating is on a seven-tiered scale from "very-low" to "very-high" based on geologic sensitivity, well construction, water chemistry and contamination sources. The susceptibility of our source is WELL PW-1 AND PW- 2 and PW-4 have a moderate susceptibility while PW-3 possesses a high susceptibility to get a copy of this report call city hall. WE HAVE ALSO PUT IN A NEW IRON REMOVAL PLANT IN WHICH WE HAVE BEGUN CHLORINATING AND IT WENT ON LINE IN THE MONTH OF OCTOBER OF 2014 WELLS PW-1 AND PW-2 AND PW-4 ARE RUN TO THE IRON PLANT AND PW-3 IS A STAND BY WELL ONLY TO BE USED IN A EMERGENCY SITUATION AND SINCE WE HAVE BEEN TESTING AT THE PLANT WE HAVE BEEN TAKING 98% OF THE IRON OUT OF OUR OUTGOING WATER INTO THE SYSTEM THEREFORE GIVING US THE ABILITY PRODUCE AND SERVE THE COMMUNITY A MUCH BETTER PRODUCT THAN PREVIOUSLY to give you a better source of drinking water.

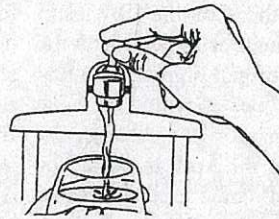
If you would like to know more about the report please contact city hall or call MARK BOLIN AT 269-463-4041

- **Contaminants and their presence in water:** 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 (800-426-4791).
- **Vulnerability of sub-populations:** 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 systems 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).

- **Sources of drinking water:** The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. Our water comes from 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:
 - T **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
 - T **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.
 - T **Pesticides and herbicides**, which may come from a variety of sources such as agriculture and residential uses.
 - T **Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production and mining activities.
 - T **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 stormwater runoff, and septic systems.

In order to ensure that tap water is safe to drink, EPA prescribes regulations that 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 provide the same protection for public health.

Water Quality Data

The table below lists all the drinking water contaminants that we detected during the 2017 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done January 1 - December 31, 2017. The State allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. All of the data is representative of the water quality, but some are more than one year old.

Terms and abbreviations used below:

- **Maximum Contaminant Level Goal (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 Contaminant Level (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 Residual Disinfectant Level (MRDL):** means the highest level of a disinfectant allowed in drinking water.

P19907
 er, PLC
 Box 378
 VI 49085
 983-0531
 2018 TCR)

aturday
 L
 DOLS.

18 TCR)

n
 l.
 MI

cal
 *
 e*
 st

p.m. at
 ard of
 iring to

et until
 018-19
 available
 oloma
 oloma,

ied to
 g.

- There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- **Maximum Residual Disinfectant Level Goal (MRDLG):** means 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.
- **N/A:** Not applicable **ND:** not detectable at testing limit **ppb:** parts per billion or micrograms per liter **ppm:** parts per million or milligrams per liter **pCi/l:** picocuries per liter (a measure of radioactivity).
- **Action Level:** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Regulated Contaminant	MCL	MCLG	Highest Level Detected	Range	Year Sampled	Violation Yes / No	Typical Source of Contaminant
Arsenic (ppb)	10	0	6	0-6	9-21-17	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium (ppm)	2	2	0.43	0.13-0.43	9-16-14	No	Discharge of drilling wastes; Discharge of metal refineries; Erosion of natural deposits
Fluoride (ppm)	4	4	0.20	0.18-0.20	2017	NO	Erosion of natural deposits. Discharge from fertilizer and aluminum factories.
THM – Total Trihalomethanes (ppb)	80	N/A	26.5	19.8-26.5	2017	NO	Byproduct of drinking water disinfection
HAA5 Haloacetic Acids (ppb)	60	N/A	5	4-5	2017	NO	Byproduct of drinking water disinfection
Chlorine (ppm)	MRDL	MRDLG	.52	.021-0.91	2017	NO	Water additive used to control microbes
	4	4					
Radioactive Contaminant	MCL	MCLG	Highest Level Detected	Range	Year Sampled	Violation Yes / No	Typical Source of Contaminant
Combined radium (pCi/L)	5	0	2.04	0.72-2.04	9-25-17	NO	Erosion of natural deposits.
Contaminant Subject to AL	Action Level	MCLG	90% of Samples ≤ This Level		Year Sampled	Number of Samples Above AL	Typical Source of Contaminant
Lead (ppb) **	15	0	1ppb		2015	0	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (ppm)	1.3	1.3	0.2PPM		2015	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Special Monitoring and Unregulated Contaminant *			Average Level Detected	Range	Year Sampled	Comments	
Sodium (ppm)			15	12-18	2017	Typical source is erosion of natural deposits	

Information about lead: 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. CITY OF WATERLIET is responsible for providing high quality drinking water, but 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>.

Microbial Contaminants	MCL	MCLG	Number Detected	Violation Yes / No	Typical Source of Contaminant
Total Coliform Bacteria	>1 positive monthly sample (>5.0% of monthly samples positive)	0	0	NO	Naturally present in the environment
Fecal Coliform and <i>E. coli</i>	Routine and repeat sample total coliform positive, and one is also fecal or <i>E. coli</i> positive	0	0	NO	Human and animal fecal waste

While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

We will update this report annually and will keep you informed of any problems that may occur throughout the year, as they happen. Copies are available at CITY HALL 158 WEST PLEASANT This report will not be sent to you.

We invite public participation in decisions that affect drinking water quality. THE CITY COUNCIL MEETING ARE HELD THE SECOND TUESDAY OF EACH MONTH AT 6:30.. For more information about your water, or the contents of this report, contact MARK BOLIN AT 269-463-4041. For more information about safe drinking water, visit the U.S. Environmental Protection Agency at www.epa.gov/safewater/.

**A paper copy of the CCR is available to be picked up at Watervliet City Hall.
 A copy can be mailed if requested.**