STATE OF MICHIGAN
DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY
LANSING

GRETCHEN WHITMER
GOVERNOR

LIESL EICHLER CLARK
DIRECTOR

July 24, 2019

VIA E-MAIL AND U.S. MAIL

Mr. Darwin Watson
City of Benton Harbor
200 Wall Street
Benton Harbor, Michigan 49022

WSSN: 00600
County: Berrien
Supply: Benton Harbor

Dear Mr. Watson:

SUBJECT: Lead and Copper Monitoring - Action Level (AL) Exceedance

During the most recent round of lead and copper monitoring of drinking water taps, from January 1, 2019, through June 30, 2019, Benton Harbor community water supply's ninetieth percentile value exceeded the AL for lead as summarized below.

Contaminant	AL	MCLG*	90th Percentile Value	Number of Sites Above AL	Range of Sample Results	Typical Source of Contaminant
Lead	15 parts per billion (ppb)	0	27 ppb	12	0 ppb – 59 ppb	Corrosion of household plumbing systems; Service lines that may contain lead; Erosion of natural deposits
Copper	1.3 parts per million (ppm)	1.3	0 ppm	0	0 ppm – 0.1 ppm	Corrosion of household plumbing systems; Erosion of natural deposits

*MCLG: Maximum contaminant level goal means 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.

An AL exceedance is not a violation, but it triggers other requirements under the administrative rules promulgated under the Michigan Safe Drinking Water Act, 1976 PA 399, as amended (Act 399). Requirements include water quality parameter (WQP) monitoring, source water monitoring, corrosion control treatment, and public education (PE). Please refer to the "Timetable of Upcoming Requirements" for your specific deadline for each of the following requirements.

Issue a Public Advisory (PA)
An amendment to Act 399 on March 29, 2017, requires a public water supply to issue a PA within three business days from the date of this letter to inform all persons served by the water system about the lead AL exceedance. It is the intent of the Department of Environment, Great Lakes, and Energy (EGLE) to work with you to develop the PE materials to distribute to your customers to fulfill both the PA and PE requirements simultaneously. A template has already been provided to you. If you plan to use broadcast media as your delivery method, please contact EGLE.

Deliver Consumer Notice of Lead and Copper Results
Within 30 days of learning the results, you must provide individual lead and copper tap results to the people who receive water from sites that were sampled, even if lead and copper were not detected. You must also send us certification that you met all delivery requirements, along with a sample copy of your consumer notice, 90 days after the end of the monitoring period. To download the *Lead and Copper Report and Consumer Notice for Community Water Supply* in Microsoft Word or PDF format, visit Michigan.gov/LCR. Select the appropriate report form based on whether you are or are not collecting samples from sites with lead services lines.

Distribute PE
Sixty days from the date of this letter or sixty days after the end of the monitoring period that exceeded the AL, whichever is sooner, deliver PE materials to all consumers. Repeat each year until the lead AL is no longer exceeded. This material is intended to educate consumers about lead health effects, sources of lead, and steps to minimize exposure. Note that the PE material must include information about the following: the exceedance in your water supply, what you are doing to reduce lead levels, lead service lines in your distribution system, and information about the history of lead levels in your water supply. A template has already been provided to you.

A sample copy of the final PE material, along with a PE distribution certification form, must be submitted to EGLE no later than ten days after the PE is due.

Conduct WQP Monitoring
As part of installing corrosion control treatment, you have been requested to collect one set of WQP samples every two weeks from the entry point to the distribution system, TP001 (Treatment Plant Tap), and quarterly from ten locations in the distribution system. The WQP samples shall be analyzed for pH, alkalinity, calcium, conductivity, orthophosphate, chloride, sulfate, and temperature. Temperature and pH are field tests and should be completed at the time of sample collection.

If you use EGLE's laboratory, order bottles by calling 517-335-8184 or by downloading the form EQP 2301 *Bottle Order Form* from Michigan.gov/EGLELab. Click on Drinking Water. The tests are analyzed from one sample bottle per location. Request the analyses using the following test codes:

Test Code	Cost	Bottle Number	Test Description
CORR	$51.00	33	Conductivity, Alkalinity, Phosphate, and Calcium
R	$18.00	32,33	Chloride, Sulfate

Conduct Source Water Monitoring
Six months after the end of the monitoring period that exceeded the AL, collect one sample for lead and copper at your entry point to the distribution system. You completed this requirement on March 16, 2019. You must repeat this sampling every third year until both lead and copper ALs are met during the entire three-year period.

Correct the Problem
Minimize lead and copper in drinking water by reducing corrosion of water pipes and household plumbing that contain lead and copper. This is your second AL exceedance. You recently installed corrosion control treatment using a phosphate product to reduce corrosion. As part of this installation, a coupon study was to be performed. Results from this study should be used to help identify the dosage necessary to sufficiently reduce corrosion rates in the distribution system. EGLE looks forward to receiving the study results and the recommendations based off those results.

Lead and Copper Monitoring
To show the ALs can be met, collect a lead and copper sample from 60 sites between July 1 and December 31, 2019, and again between January 1 and June 30, 2020.

When selecting new sites, choose the highest Tier criteria available within the distribution system, giving Tier 1 sites first priority. Please see the enclosed tiering criteria to help inform your site selection process. If you have Tier 1, or Tier 2 sites, i.e. sites with a lead service line, compliance sampling will require that you collect a first liter and fifth liter sample from each sampling location.

Within 30 days of learning of results from the samples, provide individual lead and copper tap results to people who receive water from sites that were sampled. Even if lead or copper was not detected, all monitoring, reporting, consumer notification, and EGLE certification requirements remain in effect.

Consumer Confidence Report (CCR)
Include this AL exceedance in your CCR, which is due to our office, your customers, and the local health department by July 1, 2020. You may use the table format from the first page of this letter.

Also, because the lead AL was exceeded, include the following health effects language:

> *Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.*

What Happens Next?
If you can show that both lead and copper ALs are met in two consecutive six-month periods, then many of the requirements outlined in this letter will no longer apply.

Timetable of Upcoming Requirements

Complete By	Requirement	Comments
Within three business days	Distribute a PA.	Distribute a PA to inform all persons served by the water supply of the lead AL exceedance. Distribution of the notice must be in a form and manner designed to fit the specific situation and must be reasonably calculated to reach all persons served by the public water supply.
Right away	Deliver *Consumer Notice of Lead and Copper Results* to persons served at each site tested within 30 days of knowing the result.	Download the *Lead and Copper Report and Consumer Notice for Community Water Supply* in Microsoft Word or PDF format from Michigan.gov/LCR.
Every two weeks (Starting July 1st)	Collect WQP samples. (Entry Point)	Collect one set of WQP samples every two weeks from the entry point to the distribution system, TP001 (Treatment Plant Tap).
August 29, 2019	Perform PE activities including delivering PE materials to all consumers.	PE required activities are listed in enclosed template and checklist. Repeat every year until the lead AL is met in the most recent round of sampling.
September 8, 2019	Send us certification of PE compliance along with a sample copy of the materials delivered.	Sample certification enclosed. Required within ten days of PE distribution.
Between July 1 and December 31, 2019	Collect 60 samples from the distribution system and have them analyzed for lead and copper.	Report the results to EGLE and deliver the consumer notice of individual lead and copper results using the downloadable *Lead and Copper Report and Consumer Notice for Community Water Supply* (download form at Michigan.gov/LCR). **Report due January 10, 2020.**
Between July 1 and December 31, 2019	Collect WQP samples. (Distribution system)	Collect one set of WQP samples from ten locations in the distribution system quarterly.
September 28, 2019	For the January through June 2019 monitoring, send us certification of consumer notice of lead and copper results compliance along with a sample copy of the notice delivered.	Download the *Lead and Copper Report and Consumer Notice for Community Water Supply* in Microsoft Word or PDF format from Michigan.gov/LCR.
Between January 1 and June 30, 2020	Collect 60 samples from the distribution system and have them analyzed for lead and copper.	Report the results to EGLE and deliver the consumer notice of individual lead and copper results using the downloadable *Lead and Copper Report and Consumer Notice for Community Water Supply* (download form at Michigan.gov/LCR). **Report due July 10, 2020.**
Between January 1 and June 30, 2020	Collect WQP samples. (Distribution system)	Collect one set of WQP samples from ten locations in the distribution system quarterly.
July 1, 2020	Report the 2019 AL exceedance in the CCR.	Specific lead health effects language must be included.
March 31, 2020	For the July through December 2019 monitoring, send us certification of Consumer Notice of Lead and Copper results compliance along with a sample copy of the notice delivered.	Download the *Lead and Copper Report and Consumer Notice for Community Water Supply* in Word or PDF format from Michigan.gov/LCR.
September 29, 2020	For the January through June 2020 monitoring, send us certification of Consumer Notice of Lead and Copper results compliance along with a sample copy of the notice delivered.	Download the *Lead and Copper Report and Consumer Notice for Community Water Supply* in Word or PDF format from Michigan.gov/LCR.
March 31, 2022	Collect one lead and copper sample from your entry point to the distribution system.	Repeat every third year until both ALs are met for the whole three-year period.

We recognize that the Lead and Copper Rule is complex and may be confusing. We will continue to offer assistance in implementing these regulations. If you have any questions, please contact us at BoltJ@Michigan.gov; OnanB@Michigan.gov; or at the phone numbers provided below.

Sincerely,

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Health Division
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Drinking Water and Environmental
Health Division
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Enclosures (PA Checklist, PE Checklist, WQP Report Form, Tier Criteria)
cc: Ms. Nicki Britten, Berrien County Health Department
Mr. Nick Margaritis, Berrien County Health Department
Mr. Steve Crider, Michigan Department of Health and Human Services
Mr. Mike Bolf, Engineering Unit Supervisor, EGLE
Mr. Ernie Sarkipato, Surface Water Specialist, EGLE
Mr. Jeremy Klein, District Analyst, EGLE
cc/enc: Mr. Mike O'Malley, City of Benton Harbor