#### Sanitary Survey of Community Water Supply - Review Summary

 Water Supply: City of Bangor
 WSSN: 00380

 County: Van Buren
 District: 52

Evaluator: Chunyan He Date: Comment N/A NotEv NoD/R Rec Det SigDef Required Action Category Source Construction & Maintenance Install casing vent for well #3 and well #7; X Provide backup power for chemical feed system & communication control Standby Power Х Isolation Х Source Water Protection To be updated by EGLE Х Capacity Х Treatment Provide written sampling procedure; analyze samples immediately after collection and use the same method Disinfection for analysis Х Monitor raw water fluoride level as requied; Adjust chemical injection angle to 45 deg at well 7 and well 8. Conduct investigation and make every effort to achieve the optimal fluoride residual of 0.7 mg/l Fluoride Verify abnormal data on the MOR; Explore possibilities to relocate the phosphate injection pt to avoid getting too close to the fluoride injection pt Phosphate Addition х Softening Х Iron/Manganese Removal х Arsenic Removal Х Pretreatment Х Filtration (gravity or membranes) Х Х Establish SOPs for treatment, including regularly calibrate test kit/ chemical feed pump/ scales etc.;Check/ensure test kit accuracy; Provide chemical containment; Lable each chemical day tank and injection quill; Separate sodium hypochlorite chemical in another room from other chemicals if possible Distribution System Interconnections w/ Other WS Establish a written valve turning program, continue the Hydrants & Valves valve turning excercises Х Install meter for each costomer site piping for water loss Service Lines & Metering calculatio; Review and update LCSP Х General Plan Update the GP X Review and upate the Cross Connection Program to include residential connections; Provide education to residents regarding cross connections; Submit Cross Connection report on time. Cross Connections x Establish SOPs for water main repairs, including BWA Construction & Maintenance issuance procedure Х Replace small diameter watermain (2", 4"); Address Capacity inadequate fire flow according to the RS х Finished Water Storage 24-mesh screen provided for overflow discharge pipe openning; Conduct tank inspection at least every 5 years; Complete the tower inspection form; Verify if rocks are cumulated on the overflow discharge screen; verify and address recommendations from last survey inspection Construction & Maintenance X Controls х Capacity Pumps (All Pumping Facilities) Construction & Maintenance Timely repair failed well/pump Controls

Capacity

Monitoring & Reporting							
Bacteriological Monitoring	Update bacti sampling plan; Be familiar with the repeat sample procedure						x
Chemical Monitoring	Report chlorine residual along with the Bacti results			х			
MOR or Annual Pumpage Report	Review each MOR data prior to submission and verify the abnormal data and correct them as necessary; Take corrective actions to ensure maintaining a consistent chemical dosage and achieve optimal chemical residual			x			x
Consumer Confidence Report	Ensure CCR includes all the required elements			х			
Analytical Capabilities			х				
System Management & Operations							
Owner Responsibility	Maintain water system records			х			
Capacity Development	Address TMF capacity					х	
Reliability Study	Update the Reliability Study				х		
Operations Oversight Permits	Update SOPs for system operation;Create SOPs for training new staff; Follow the sampling manual/guidance correctly.  Provide the specifications for new VFD for well #9			x x			
Operator Compliance							
Operator Certification	Complete the Operator Designation Form			Х			
Technical Knowledge & Training			х				
Security							
Emergency Response Plan	Update ERP						Х
Site Security (Fences, Alarms) Financial				Х			
Rates			Х				
Budget & Capital Imp. Plan	Update AMP per comments, including CIP		^	х	х		
Other	Transition per services, more and on		Х		-		
Otrior			^				

N/A - Not Applicable Rec - Recommendations Made

NotEv - Not Evaluated Def - Deficiencies Identified NoD/R - No Deficiencies/Recommendations Made SigDef - Significant Deficiencies Identified

# City of Bangor



# EGLE Administrative Constent Agreement and Water System Survey Summary

Abonmarche Consultants 95 W Main Street Benton Harbor, MI 49022

By Jason Marquardt, Senior Project Manager & Construction Group Director

## EGLE Water System Sanitary Survey

#### **Purpose**

- Evaluate compliance with Michigan Safe Drinking Water Act (Act 399).
- Identify potential risks that may adversely affect drinking water quality.
- Update EGLE's Records
- Proactive public health measure
- Required to be completed by <u>EGLE every three (3) years</u>
- Survey was conducted by EGLE on <u>February 2, 2024</u>
- Findings letter received by the City on <u>October 11, 2024</u>

Water Supply: City of Bangor	Sanitary Survey of Community Water Supply - Review Se		.,	V	VSSN:	. 0	0380	
County: Van Buren					istrict:		52	-
Evaluator: Chunyan He					Date:		7/2024	
Category	Comment	N/A	NotEv	NoD/F	Rec	Def	SigDef	Required
source								
	Install casing vent for well #3 and well #7:	ı	1			9000		
Construction & Maintenance		_				×		
	Provide backup power for chemical feed system &							
Standby Power Isolation	communication control			×	х			
Source Water Protection	To be updated by EGLE	_	×	×				
Capacity	TO be appealed by EGEE		^	×				
Treatment		_		^				
roughon	Provide written sampling procedure; analyze samples							
Disinfection	immediately after collection and use the same method for analysis	ı			×			
	Monitor raw water fluoride level as requied; Adjust							
	chemical injection angle to 45 deg at well 7 and well 8.					ı		
	Conduct investigation and make every effort to achieve					ı		
Fluoride	the optimal fluoride residual of 0.7 mg/l							×
	Verify abnormal data on the MOR; Explore possibilities	ı	1			ı		
Discount of Addition	to relocate the phosphate injection pt to avoid getting too	ı	ı	ı		I	ı	l
Phosphate Addition Softening	close to the fluoride injection pt				×			
Iron/Manganese Removal		×						
Arsenic Removal		x						
Pretreatment		×						
Filtration (gravity or membranes)		×						
C*T		x						
	Establish SOPs for treatment, including regularly							
	calibrate test kit/ chemical feed pump/ scales					ı		
	etc.; Check/ensure test kit accuracy; Provide chemical					ı		
	containment; Lable each chemical day tank and injection					ı		
	quill; Separate sodium hypochlorite chemical in another					ı		
Other	room from other chemicals if possible				х			
Distribution System								
Interconnections w/ Other WS								
	Establish a written valve turning program, continue the							
Hydrants & Valves	valve turning excercises				×			
	Install meter for each costomer site piping for water loss							
Service Lines & Metering	calculatio; Review and update LCSP		l		×	l		ı
General Plan	Update the GP	_			^	×		
General Plan	Opdate the Gr							
	Review and upate the Cross Connection Program to		ı			ı		ı
	include residential connections: Provide education to	ı	ı	ı	1	ı	1	I
	residents regarding cross connections; Submit Cross	ı	ı	1	1	ı	1	I
Cross Connections	Connection report on time.	ı	ı	1	×	ı	1	I
					l ^	i .		
	Establish SOPs for water main repairs, including BWA				200			
Construction & Maintenance	issuance procedure				X			
0	Replace small diameter watermain (2", 4"); Address		ı			ı		1
Capacity	inadequate fire flow according to the RS	-			х			
inished Water Storage								
	24-mesh screen provided for overflow discharge pipe	ı	ı			ı		I
	openning; Conduct tank inspection at least every 5	ı	ı	1	1	ı	1	I
	years; Complete the tower inspection form; Verify if	ı	ı	ı	1	ı	1	I
	rocks are cumulated on the overflow discharge screen;	ı	l	1	l	ı	1	I
	verify and address recommendations from last survey	ı	ı	1	1	ı	1	I
Construction & Maintenance	inspection					×		
Controls				×				
Capacity		ш		х		L_		
Pumps (All Pumping Facilities)								
Construction & Maintenance	Timely repair failed well/pump	ı .	ı	×		ı		
Controls								

## Results of Findings

### EGLE will categorize their findings using the below criteria

- Significant Deficiencies
  - Significant Deficiencies are a serious sanitary deficiencies identified in water systems and must be corrected within 120 days of the date of the notice from EGLE
- Deficiencies
  - Deficiencies are violations of Act 399 which include defects in a water system's infrastructure, design, operation, maintenance or management that may cause interruptions and may adversely affect the systems ability to produce safe and reliable drinking water in adequate quantities
- Required Actions
  - Required Actions are not deficiencies by must be completed by dates indicated in the findings letter
- Recommendations
  - Recommendations are suggestions the public water supply should consider, to enhance its operations and services

## **Key Survey Findings**

EGLE will identify the following items within a community's water system

Survey Element	Findings		
Source	Deficiencies Identified		
Treatment	Required Actions/Recommendations Made		
Distribution System	Deficiencies Identified		
Finished Water Storage	Deficiencies Identified		
Pumps	Recommendations Made		
Monitoring & Reporting	Required Actions/Recommendations Made		
Management & Operations	Significant Deficiencies Identified		
Operator Compliance	Recommendations Made		
Security	Required Actions/Recommendations Made		
Financial	Deficiencies Identified		
Other	No Deficiencies/Recommendations		

## Significant Deficiencies

## Significant Deficiencies Identified

- 1. Need to provide updates to the following plans (general, reliability, and asset management).
- 2. Consistency of water quality consistency (e.g., coliform and fluoride levels).
- 3. Provide and confirm financial and operational decision-making processes.
- 4. Confirm revenue to match expenditures.
- 5. Provide the City's Technical, Managerial, and Financial Capacity (TMF Study)

## **General Deficiencies**

## Significant Deficiencies Identified

- 1. Updates are needed to the General Plan
- 2. Resubmit an updated Reliability Study (has been sent to EGLE as DRAFT)
- 3. Casing vents sizing needs review for wells 3 and 7 (one well has already been completed)
- 4. Update the City's Water Asset Management Program and Plan
- 5. Provide inspections at the finished water storage

## Next Steps and Administrative Consent Agreement

- EGLE has recently had meetings and discussions recommending that the City enter an Administrative Consent Agreement (ACA)
- An ACA allows EGLE and the water supply to develop a mutually acceptable alternative compliance timeline.
- The ACA allows EGLE and the City to update requirements pertaining to the findings of the sanitary survey over time with the ability to update and amend it overtime and to provide adequate timeframes to produce and prepare items that cannot be done quickly within the water system.

## Compliance Schedule

ACA Item	Date*	Details
Approval of ACA	February 7, 2025	
Documentation of Corrective Issues	L Anrii Δ Jujis	Includes sending in current Bacteriological Sampling Plan, updating lead & copper sampling plan, and providing updates to residents.
Complete General Plan, Water Reliability Study, and Water Asset Management Plan	I IUNE 6. 2025	Draft Water Reliability Study and Water Asset Management Plans have been sent to EGLE already.
Complete New Rate Study	AUGUST X JUJS	Upon completion and adoption by the City for the above studies, a new rate study will be required to account for any improvements.
Complete update to Standard Operating Procedures	August 8, 2025	Standard Operating Procedures will be updated for use by the City and for EGLE's records.
Approval of New Rate Study	September 5, 2025	Time to review, discuss, and approve any rate changes that may or may not be needed to correct or remedy any deficiencies.
Submit Technical, Financial, and Managerial Capacity (TMF) Study	March 6, 2026	A TMF Study will summarize the physical, operational, administrative, and financial ability of a water system.
Implement the TMF Study	May 8, 2026	Time to review, discuss, and adopt the TMF Study and findings for implementation.

<sup>\*</sup>Final date will be confirmed in agreement

# Questions?



#### **CITY COUNCIL AGENDA FACT SHEET**

**To:** Mayor Farmer, Pro Tem Martinez-Serratos, Councilmember Rivers, McCrumb,

Garcia, Muenzer and Uplinger

**CC:** Justin Weber, City Manager

From: Stephenie Cagle, Treasurer

CC: Shelly Umbanhowar, Clerk

**Subject:** Agenda Item 9 f.

**Date:** 02/03/25

#### **Council Information:**

City Manager Weber recommends the appointment of Kathryn Lugten to the Planning Commission. The background check has been completed.

#### **Council Action:**

Accept the appointment of Kathryn Lugten to the Planning Commission.

Place documents in tab 6