



GRETCHEN WHITMER
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY
GRAND RAPIDS DISTRICT OFFICE



LIESL EICHLER CLARK
DIRECTOR

May 20, 2022

VIA EMAIL

Ellis Mitchell, City Manager
City of Benton Harbor
200 Wall Street
Benton Harbor, Michigan 49022

WSSN: 00600
County: Berrien

Dear Ellis Mitchell:

SUBJECT: City of Benton Harbor Compliance Update for
Amended Administrative Consent Order (AACO) AACO-399-07-2019;
2021 Sanitary Survey Findings

The Department of Environment, Great Lakes, and Energy (EGLE), Drinking Water and Environmental Health Division (DWEHD) would like to provide a compliance update for the City of Benton Harbor Water Supply (City) to meet specific requirements of Section II – Compliance Schedule of the first amended Administrative Consent Order (AACO) entered on August 7, 2020, and to address findings from the 2021 Sanitary Survey. EGLE acknowledges the City is also responding to requirements from a Unilateral Administrative Order from the U.S. Environmental Protection Agency (EPA).

Paragraph 2.14 – Technical, Managerial, and Financial Capacity (TMF) Study

The City submitted a draft TMF Study, completed by Fleis & VandenBrink Engineering, on February 7, 2022. EGLE acknowledges the City’s compliance with this extended deadline. The TMF Study has not been approved at this time, and additional steps are needed, as outlined in EGLE’s letter to the City, dated May 5, 2022. **EGLE requests a revision to the TMF Study, no later than August 3, 2022, with a proposal for closing the financial gaps identified.** At such time, the TMF Study is approved by EGLE, and additional AACO compliance schedule items are triggered, namely Paragraphs 2.8, 2.10 (a) and (b), and 2.15 (a) and (b).

The City has made progress in addressing EGLE’s Sanitary Survey findings. EGLE’s letter dated March 24, 2022, provided compliance status updates on the highest priority items (significant deficiencies). The letter also identified new minor deficiencies for continued follow-up by the City to resolve findings of the 2021 Sanitary Survey. **The purpose of this letter is to highlight items with deadlines for the City’s awareness and prioritization.** EGLE acknowledges the many

competing priorities of the water system and asks the City to refer to the 2021 Sanitary Survey findings list for planning purposes.

Revised Total Coliform Rule (RTCR) - Sample Siting Plan

In the 2021 Sanitary Survey, EGLE noted two areas of the distribution system that are under-represented by the current Sample Siting Plan for total coliform. During EGLE's onsite meeting on May 3, 2022, with City water system representatives, options were discussed for installation of exterior sampling stations in these areas of town due to lack of available locations that are accessible. **EGLE requests the City submit a detailed plan and schedule for installation of monitoring stations and an updated RTCR Sample Siting Plan, no later than June 10, 2022.**

Contact Time Calculations

EGLE acknowledged the discovery of a different post-chlorination point at the high service suction well, and requested a plan be submitted to accurately account for the finished water reservoir disinfection segment. The City requested EGLE extend the initial deadline for this submittal. The City also submitted disinfection calculations for 2022, which verify adequate disinfection was achieved in the pre-treatment system. The City's letter to the EPA, dated May 6, 2022, indicated locations of future chlorine addition and monitoring, but did not propose a timeline.

In a related matter, EGLE's 2021 Sanitary Survey also noted a minor deficiency for non-compliance with Rule 1008 (5)(b), which requires chlorine application points be available immediately preceding and immediately following filtration.

EGLE approves the City's request to extend the original deadline, of April 15, 2022, and is asking the plan also include a timeline for installing the proposed chlorine feed points and the chlorine monitoring points. **Please submit a plan as outlined above with a timeline for installation, no later than June 15, 2022.**

Instrumentation Standard Operating Procedures (SOP)

EGLE noted a minor deficiency for failure to implement the draft SOP for online turbidity and chlorine monitoring instruments. Reference the March 24, 2022, letter for detailed information on requested edits to the SOP. **The City has made progress on revising and implementing the SOP and should complete a formal submittal to EGLE, no later than May 25, 2022.**

Finished Water Reservoir Inspection

EGLE recommended dewatering of the reservoir valve vault(s) and verification of isolation valve functionality. Additionally, **EGLE requests the City conduct a professional inspection of the reservoir as soon as possible, but not later than December 31, 2022.** Included in the inspection should be documentation of the overflow and any risks associated with cross connection to sewer. EGLE has not received acknowledgement of the City's intent to complete the inspection.

Inspection of Suction Well and Investigation of Overflow

In the March 24, 2022, letter, EGLE requested the City arrange for a professional inspection of the high service suction well, submit the inspection report and any proposed work to EGLE, and address the cracking in the ceiling as needed to assure safe structural conditions. In addition, EGLE requested the City also arrange for an assessment of risk of backflow and needed corrective action must be completed to ensure protection of the finished drinking water. **The deadline to address these deficiencies is December 31, 2022.**

Cross Connection Control Program

EGLE continues to be concerned about the public health risk of drinking water contamination due to the long-time absence of a cross connection control program. The AACO is structured to use the approved TMF Study and implementation plan to guide the ultimate solution to this significant deficiency. Due to the duration of the TMF Study schedule and the preliminary indications of financial gaps in capacity, an interim plan is necessary to increase protection of public health. The City must provide a short-term contingency plan for the identification and elimination of cross connections as well as a standard operating procedure for water quality complaint investigations including cross connection control. **The short-term plan must be submitted, by June 24, 2022, and be implemented as soon as possible.**

Filter Repairs

The City has successfully replaced the waste valve actuator for Filters 9 and 10, following the revised filter repair plan submitted to EGLE and EPA, on March 15, 2022. In addition to other repairs outlined in the revised plan, EGLE is requesting the City prioritize the repair or replacement of the backflow preventer that feeds the surface wash and hydraulic actuator system to prevent backflow to the finished water. Acknowledging the delays caused by parts availability, **EGLE requests the City repair or replace the backflow**

preventer and obtain a successful test to ensure functionality, no later than September 30, 2022.

Additionally, EGLE requests the City confirm the operators continue to follow the previously approved SOP for filter backwashing and verify in writing to EGLE, no later than June 3, 2022.

If you have any questions regarding the AACO or Sanitary Survey requirements and deadlines, please contact me at 616-307-0261; or by email at SarkipatoE@Michigan.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Ernie Sarkipato". The signature is fluid and cursive, written in a professional style.

Ernie Sarkipato, P.E.
Surface Water Treatment Specialist
Drinking Water and Environmental Health Division

cc: Mayor Marcus Muhammad, City of Benton Harbor (via email)
Tiffany Moore, Clerk, City of Benton Harbor (via email)
Beth Murphy, EPA Enforcement and Compliance Assurance Division (via email)
Abul Ahmed, Fleis & VandenBrink Operations (via email)
Darold Harlan, Fleis & VandenBrink Operations (via email)
Eric Oswald, EGLE (via email)
Brian Thurston, EGLE (via email)
Mike Bolf, EGLE (via email)
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