



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

DEC 12 2017

REPLY TO THE ATTENTION OF:
W-15J

The Honorable Karen W. Weaver, Mayor
City of Flint
1101 South Saginaw Street
Flint, Michigan 48502

Mr. Keith Creagh, Director
Michigan Department of Natural Resources
Constitution Hall
525 West Allegan Street
P.O. Box 30028
Lansing, Michigan 48909

Re: Next Steps for Complying with EPA's January 21, 2016 Emergency Order and the November 17, 2016 First Amendment Given the City of Flint's Intended Long-term Primary and Back-up Water Sources

Dear Mayor Weaver and Director Creagh:

This letter follows up on the Flint City Council's November 21, 2017 approval of the 30-year contract (Master Agreement) whereby the Great Lakes Water Authority (GLWA) will serve as the City of Flint's (City) primary water source and an interconnection with the Genesee County Drain Commissioner (GCDC) will serve as the City of Flint's backup water source. The City Council's approval of the Master Agreement accords with the Mayor's April 19, 2017 written notification to EPA that identified these intended source waters.

With the approval of all parties to the Master Agreement on November 29, 2017 – including GCDC, GLWA, the City, the Michigan Department of Environmental Quality (MDEQ), and the Karegnondi Water Authority (KWA) – the City has secured continued long-term access to the current GLWA water source. The decision to maintain the City's current primary water source obviates the need for the Respondents (the City, MDEQ, and the State of Michigan) to complete certain requirements in paragraph 60 of EPA's November 17, 2016 First Amendment (First Amendment) to its January 21, 2016 Emergency Order (Order). However, requirements in the First Amendment addressing issues that arise from continuously blending the primary GLWA water source with the GCDC back-up water source (up to 5 percent GCDC water at any given time) remain in effect.

Now that the City has identified its long-term primary and back-up sources of drinking water and a Master Agreement is in place, the purpose of this letter is to provide Respondents with a list of the outstanding requirements that need to be completed to achieve compliance with both the Order and its First Amendment. The requirements that remain outstanding are categorized into four areas:

1. Ensuring the continued transparency of Respondents' efforts to comply with EPA's Order and First Amendment [Paragraphs 51, 52, 53, 54, 57, 58, 59, 62, 63, and 64 of Order; Paragraph 60 of First Amendment];
2. Completing the corrosion control study of the City's current GLWA water source and the proposed blend of GLWA and GCDC water sources that will be used once the emergency interconnection between the City and GCDC is complete [Paragraph 59 of Order; Paragraph 60 of First Amendment];
3. Demonstrating the City's technical, managerial and financial (TMF) capacity to operate its public water system (PWS) [Paragraph 61 of Order; Paragraph 60 of First Amendment]; and
4. Providing written notification to EPA within five days of any future decision to change the City's primary and/or back-up water sources from the GLWA and GCDC sources identified in Mayor Weaver's April 19, 2017 letter to EPA on behalf of the City [Paragraph 60 of First Amendment].

The enclosed document provides further details on the deliverables and activities that Respondents must complete to meet the remaining Order and First Amendment requirements. These deliverables and activities will serve as the main points of discussion and requests for status updates during future EPA Order compliance technical meetings among EPA, the City, and MDEQ. Please note that all requirements in EPA's Order and its First Amendment remain in effect until the provisions set forth in paragraphs 75 and 76 of the Order have been satisfied.

I appreciate your prompt attention to this matter. EPA recognizes the efforts undertaken by the Respondents to date to help the City's PWS recover, including the accelerated efforts to remove all of the City's lead service lines. We look forward to our continued work with you to ensure that the City is able to operate a reliable PWS and provide safe drinking water to its customers.

Please do not hesitate to contact me at (312) 353-8320 or korleski.christopher@epa.gov with any questions or concerns that you may have regarding the content of this letter and the requirements of EPA's Order and its First Amendment.

Sincerely,



Christopher Korleski
Director, Water Division

Enclosure

cc: Mr. Robert Kaplan, Acting Regional Administrator, EPA Region 5
Mr. Steve Branch, Acting City Administrator, City of Flint
Mr. Robert Bincsik, Public Works Director, City of Flint
Mr. Richard Baird, Michigan Governor's Office
Ms. C. Heidi Grether, Director, MDEQ
Ms. Amy Epkey, Environment Deputy Director, MDEQ
Mr. Eric Oswald, Director, Drinking Water and Municipal Assistance Division, MDEQ

ENCLOSURE

Remaining Requirements of EPA's Order and First Amendment to be Addressed by Respondents

Now that the City has identified its long-term primary and back-up sources of drinking water and a Master Agreement is in place, the purpose of this letter is to provide Respondents with a list of the outstanding requirements that need to be completed to achieve compliance with both the Order and its First Amendment. The requirements that remain outstanding are categorized into four areas:

1. Ensuring the continued transparency of Respondents' efforts to comply with EPA's Order and First Amendment [Paragraphs 51, 52, 53, 54, 57, 58, 59, 62, 63, and 64 of Order; Paragraph 60 of First Amendment];
2. Completing the corrosion control study of the City's current GLWA water source and the proposed blend of GLWA and GCDC water sources that will be used once the emergency interconnection between the City and GCDC is complete [Paragraph 59 of Order; Paragraph 60 of First Amendment];
3. Demonstrating the City's technical, managerial and financial (TMF) capacity to operate its public water system (PWS) [Paragraph 61 of Order; Paragraph 60 of First Amendment]; and
4. Providing written notification to EPA within five days of any future decision to change the City's primary and/or back-up water sources from the GLWA and GCDC sources identified in Mayor Weaver's April 19, 2017 letter to EPA on behalf of the City [Paragraph 60 of First Amendment].

1. Continued Transparency

Paragraphs 51, 52, 53, 54, 57, 58, 59, 62, 63, and 64 of Order; Paragraph 60 of First Amendment

Prior to EPA's Order in January of 2016, there was inadequate transparency of what was happening with regard to the treatment and distribution of Flint's drinking water. Paragraph 51 of the Order required the creation and ongoing maintenance of a publicly available website where the Respondents could post all data, reports, and documentation required under the Order (primarily paragraphs 52, 53, 54, 57, 58, 59, 60, 63 and 64). It is critical that this website be maintained until EPA determines that the Respondents have satisfied all Order and First Amendment requirements so that the public can remain informed of the Respondents' efforts and the quality of the City's drinking water.

This requirement to post to the website (par. 51) applies to the following:

- a. Written responses to all requests and recommendations of the EPA Flint Technical Support Team (formerly known as the EPA Flint Task Force) (par. 52);
- b. Water quality parameter (WQP) measurements in the distribution system and lead sampling results (par. 53 and 58);
- c. Existing inventory of homes with lead service lines (in Excel or similar format) (par. 54);
- d. Chlorine residual levels in the distribution system (par. 57);
- e. Monitoring plans and schedules to ensure that corrosion control treatment (CCT) is optimized, which includes weekly posting of daily WQP monitoring results in the distribution system (par. 59); and

- f. Distribution system water quality optimization plan development and implementation to evaluate and improve the City's programs that affect distribution system water quality (includes developing and posting standard operating procedures (SOPs) and water quality data) (par. 62).

Paragraphs 63 and 64 of the Order requires the Respondents to engage a panel consisting of the following: 1) independent, nationally-recognized experts on drinking water treatment, sampling, and distribution system operation; and 2) members of the affected community, to advise and make public recommendations to the City. Governor Snyder created the Flint Water Interagency Coordinating Committee (FWICC) to meet the EPA Order requirement. While the FWICC was formed in January of 2016 per the Order and met on a monthly basis, it did not have meetings between July and December of 2017. Regular meetings of the FWICC are critical to maintaining transparency and restoring public trust since they provide a forum to discuss the efforts planned and completed to ensure that the PWS complies with the Safe Drinking Water Act (SDWA) and its implementing regulations. While the FWICC meetings are not open to public attendance, EPA appreciates the availability of live streaming and posting of the meeting on YouTube after the original meeting date. We expect this to continue and that the reliability of the livestream is improved so that the public may obtain up-to-date information.

Finally, paragraph 60 of the First Amendment requires the submission of various plans and demonstrations of progress to ensure that the PWS complies with SDWA and its implementing regulations. The reporting and notification requirements ensure the public is informed on a monthly basis of the schedules, milestones and expenditures for the various efforts being performed by the Respondents to comply with EPA's Order and First Amendment. These provisions must continue to be met.

2. Completion of Corrosion Control Study (CCT) of the City's Current and Planned Water Sources

Paragraph 59 of Order; Paragraph 60 of First Amendment

Paragraph 59 of the Order requires the Respondents to optimize CCT for the PWS as operated in general for its GLWA source water. It is critical that the Respondents implement the full corrosion control study (CCS) plan for the current GLWA water source as well as the proposed blend of the GLWA and GCDC water sources that will be used once the emergency interconnection between the City and GCDC is complete. The new source requirements in paragraph 60 of the First Amendment that remain in effect are needed to address the new source resulting from the continuous blend of the GLWA and GCDC water sources. These requirements in paragraph 60, specifically the need for the Water Treatment Plant Modification Plan and New Source Treatment Plan (NSTP), must be met by providing and implementing plans for how the PWS will handle the blend and how the use of the blend may affect CCT. This information needs to be publicly available so interested stakeholders can be informed.

EPA has reviewed the Lead CCT Coupon Study submitted by the City on November 20, 2017 and supports the City's plan to use the results of its coupon study to further assess optimized CCT using the pipe loops created by EPA.

Respondents still need to submit information to meet many of the requirements in paragraph 59 of the Order for optimizing CCT including the development of SOPs and monitoring plans for Lead and Copper Rule (LCR) compliance and daily monitoring of WQPs in the distribution system. In addition, Respondents must submit an operations plan for corrosion control equipment and daily monitoring of finished water corrosion control parameters. These plans are required for operating the system with current GLWA water as well as the proposed blend of the GLWA and GCDC source waters, with the

latter blended source triggering the requirements of paragraph 60 in the First Amendment as outlined above.

Given that the Respondents must still submit to EPA a monitoring plan for LCR compliance as well as an inventory of homes with lead service lines (LSLs) (in Excel or similar format), it is critical that the City update its LSL inventory based on the results of the FAST Start LSL replacement efforts and the work being done to digitize the materials inventory of the City's service lines. EPA appreciates the work underway to identify the City's LSLs and looks forward to receiving an updated materials inventory once the records have been digitized and checked against recent field findings for the service line materials. It is critical that LCR compliance samples be collected from known Tier 1 sites in future compliance monitoring periods to ensure that CCT is optimized and the occurrence of lead is minimized.

3. City's Technical, Managerial and Financial Capacity to Operate its Public Water System

Paragraph 61 of Order; Paragraph 60 of First Amendment

In its correspondence, EPA has previously emphasized the importance of paragraph 61 of the Order, i.e., that the City must demonstrate, and the MDEQ and State must ensure, that *the City has the necessary, capable and qualified personnel* required to operate the Flint PWS. EPA appreciates that the City has hired a Director of Public Works and is moving forward to staff the PWS to the level needed for a system that is amending purchased water. It is critical that the City meet its staffing needs as soon as possible with permanent City staff; therefore, EPA will continue to request hiring updates during our meetings with the Respondents to discuss Order compliance.

Paragraph 60 of the First Amendment emphasizes the need for the NSTP to address the City's technical, managerial, and financial (TMF) capacity to operate its PWS in compliance with the SDWA and its implementing regulations. Now that the City has made a long-term source water decision, which includes a new source of blended GLWA and GCDC water sources, the Respondents must update the NSTP submitted to EPA earlier this year to reflect how the TMF capacity needs for the PWS will be met.

Ensuring that the City has the TMF capacity to operate its PWS has implications beyond EPA's Order requirements. Under the Drinking Water State Revolving Fund – which was the source of the \$120 million of Water Infrastructure Improvements for the Nation Act of 2016, or WIIN – funding has been designated to improve the City's water infrastructure. Systems eligible to receive funding must have TMF capability, or agree to undertake feasible or appropriate changes in operations to ensure compliance over the long-term.

4. Written Notification of Any Decisions to Change the City's Source of Drinking Water

Paragraph 60 of First Amendment

EPA reminds Respondents that written notification must be provided to EPA within five days of any decision to change the City's primary and/or back-up water sources from the GLWA and GCDC sources identified in Mayor Weaver's April 19, 2017 letter to EPA on behalf of the City.