



RICK SNYDER
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
LANSING



KEITH CREAGH
DIRECTOR

June 21, 2016

VIA E-MAIL

Mr. Mark Pollins, Director
Water Enforcement Division
Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
United States Environmental Protection Agency
William Jefferson Clinton Building
1200 Pennsylvania Avenue, NW (2243A)
Washington, DC 20460

Dear Mr. Pollins:

Thank you for your June 3, 2016, letter reinforcing concerns about residual chlorine levels in the drinking water distribution system in Flint, Michigan. We understand the need and challenges associated with maintaining chlorine residuals during the warm summer months, and we are committed to assisting the city of Flint (City) in meeting this challenge. Michigan Department of Environmental Quality (MDEQ) staff have spent considerable time assisting the City, including, as you noted in your letter, approving the City's temporary sodium hypochlorite and sodium hydroxide feed system approach on June 1, 2016. Your letter also noted that during our June 2, 2016, telephone call with the City, they agreed with a target of June 10, 2016, for the installation of the temporary feed system.

In addition to the activities noted in your letter, the MDEQ documented the following recent activities related to installation of the required chemical feed systems:

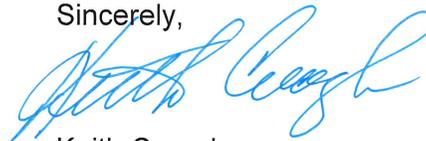
- On June 3, 2016, Ms. JoLisa McDay, city of Flint, e-mailed the county, requesting for the shutdown of the 72" line to allow installation of the chemical feed injection taps. The MDEQ e-mailed the county shortly after supporting the City's request. Ms. McDay informed the MDEQ on June 6, 2016, that the line was down for no longer than one hour and full service was restored 30 minutes later. The total time of the shutdown was 1.5 hours.
- On June 3, 2016, the City authorized the MDEQ to provide expertise and equipment needed.
- The MDEQ reviewed Lockwood, Andrews and Newnam, Inc.'s (LAN) plans over the weekend of June 4-5, 2016. In addition, I emphasized in a June 4, 2016, e-mail to Mr. Steve Branch, city of Flint, the urgency of installing equipment and offered support.
- On June 6, 2016, the City reported they had installed the injector and had purchased other materials needed.
- On June 6, 2016, the City submitted a permit application for the installation of temporary chemical feed systems at the water treatment plant.

- The United States Environmental Protection Agency (EPA) met with the MDEQ on June 7, 2016, and discussed the status of chemical feed installation and the City's need to determine a long-term water source.
- The issue of chlorine residuals was discussed at the June 8, 2016, meeting of the Flint Water Interagency Coordinating Committee's Infrastructure Subcommittee, which MDEQ staff attended.
- On June 8, 2016, LAN submitted modifications to the plans to the MDEQ. Modifications were necessary due to the equipment availability and based on discussions held on June 8, 2016, with the City's water treatment plant staff.
- On June 9, 2016, the MDEQ reported measureable safeguards and monitoring protocols were in place to begin adding sodium hypochlorite the next day and that City water treatment plant staff demonstrated their ability to conduct the required monitoring and dose calculations. In addition, the required sodium hypochlorite was delivered. Some additional chemical feed pump appurtenances also arrived at the water treatment plant.
- On June 9, 2016, Mr. Tom Speth, EPA, supported the proposed "shakedown operation" at the water treatment plant on June 10, 2016, to test the chemical feed system as well as the dose of 0.3 mg/L. Continuous sodium hypochlorite feed was to begin on June 13, 2016.
- On June 10, 2016, City staff began adding sodium hypochlorite to test the system, implementing the "shakedown operation." All electrical and mechanical appurtenances appeared to be working perfectly. MDEQ staff were on-site to help monitor the drawdowns for dose calculations and chlorine residuals during the subsequent hours. The chemical feed system was shut down over the weekend.
- MDEQ staff were on-site on June 13, 2016, to assist with commencing continuous addition of sodium hypochlorite. The MDEQ will be on-site all this week or longer to observe and assist as necessary.

We continue to be committed to providing the support needed to the City to meet the EPA Emergency Order. We thank you and your staff for your ongoing assistance in meeting this part of the EPA Emergency Order and look forward to continuing our partnership with you and the City.

Should you need further information, please contact Mr. Bryce Feighner, P.E., Special Advisor on Drinking Water, at 517-652-1580; feighnerb@michigan.gov; or MDEQ, P.O. Box 30241, Lansing, Michigan 48909-7741; or you may contact me.

Sincerely,



Keith Creagh
Director
517-284-6700

cc: Mayor Karen Weaver, City of Flint
Mr. Tom Speth, EPA
Ms. JoLisa McDay, City of Flint
Mr. Steve Branch, City of Flint
Mr. Jim Sygo, Chief Deputy Director, MDEQ
Mr. Bryce Feighner, MDEQ
Mr. George Krisztian, MDEQ