



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 2  
290 BROADWAY  
NEW YORK, NY 10007-1866

November 22, 2019

Hon. Catherine McCabe  
Commissioner  
New Jersey Department of Environmental Protection  
401 East State Street  
P.O. Box 402  
Trenton, NJ 08625-0402

and

Hon. Ras Baraka  
Mayor  
City of Newark, New Jersey  
920 Broad Street #200  
Newark, NJ 07102

Dear Commissioner McCabe and Mayor Baraka:

I am writing as a follow-up to my letter dated August 9, 2019, and to thank you for the actions you and your offices have taken during the past months to address concerns about elevated levels of lead in portions of the City of Newark's drinking water system. We appreciate the continued strong collaboration among our respective staff, exemplified by the frequent technical conference calls which have led to the approaches on the sampling and analysis work that has informed Newark's recommendations.

During the past months, we have together implemented a thoughtful, coordinated sampling program. The goal of this program was to determine if the filters provided by Newark are reducing lead in tap water to levels of 10 parts per billion (ppb)<sup>1</sup> or below, under the current conditions in Newark and when the filters are properly installed and maintained. EPA is pleased that conducting this study has enabled the City to gain the valuable information that, in Newark, point of use filters paired with flushing with the filter in the off position for at least five (5) minutes should be used to reduce lead in the interim until the corrosion control in Newark is optimized and effectively reducing lead in tap water.

During this program, about 1,600 separate samples were collected from over 300 residences located in areas served by the Pequannock water supply, where either faucet-mounted or pitcher-type filters were in use. Between August 14 and September 6, 2019, sampling was carried out by

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<sup>1</sup> The filters in question have previously been certified by NSF International to reduce lead to levels below 10 ppb, when the unfiltered water has lead levels of 150 ppb or less. The certification tests take place under specified laboratory conditions.

teams with members from Newark and its contractor CDM Smith, the New Jersey Department of Environmental Protection (NJDEP), and the U.S. Environmental Protection Agency (EPA). The samples were analyzed at Newark and New Jersey Department of Health laboratories, as well as EPA's laboratory in Edison, New Jersey. The sampling results were subjected to quality assurance/quality control by CDM Smith and New Jersey and were shared among our offices and carefully reviewed.

On September 22, 2019, EPA received for review a draft report from Newark that presented the City's preliminary analysis, findings, and recommendations based on the results from the sampling program. In October and November 2019, additional drafts of the report were also shared with EPA. EPA's technical experts reviewed these drafts and worked closely with Newark, CDM Smith, and NJDEP on evaluating the information and providing our technical input. On November 19, 2019 EPA received the final report from Newark, prepared after the city and CDM Smith had an opportunity to consider EPA's and NJDEP's input.

Based on the information and findings presented to EPA from Newark in CDM's report, EPA supports Newark's recommendation that point of use filters, paired with flushing with the filter in the off position for at least five minutes, are recommended for continued use in the interim until the corrosion control in Newark is optimized and effectively reducing lead in tap water. The importance of both flushing with the filter in the off position for at least five minutes and filtering, in combination, is highlighted in multiple ways in the CDM report. In all cases when the unfiltered lead levels were greater than 150 ppb, the filters in Newark did not reduce lead to 10 ppb or below. This is consistent with the findings from the sampling conducted originally in August. CDM's report also found that lead concentrations in unfiltered, unflushed, tap water samples were, on average, more than twice the lead levels in unfiltered, flushed tap water samples. Flushing with the filter in the off position for at least five minutes is expected to reduce the lead concentrations to levels at which the results of the study indicate that filters will likely perform as expected reducing lead levels to 10 ppb or below when properly installed and maintained.

The Agency also supports Newark's recommendation that residents who can use faucet-mounted filters should be advised to do so. EPA recognizes that some residents may not be able to install faucet-mounted filters due to the configuration of their plumbing fixtures and therefore they must use pitcher filters. We understand that CDM was unable to draw conclusions about the efficacy of pitcher filters due to the small sample size. For residents who cannot use faucet-mounted filters, and therefore use pitcher filters, it is particularly important that they flush for at least five minutes and also properly use and maintain the pitcher filter.

Finally, we note that 67 of the 265 PUR filters were not viable for use in the study due to improper installation and maintenance by homeowners. It is therefore important that the City implement a strong education and outreach program regarding proper installation and operation of filters to help ensure the efficacy of the core flushing and filtering recommendation. In the detailed comments about Newark's draft report that EPA provided to the City, the Agency specifically supported the following recommendations in that report, including that Newark:

- emphasize flushing with the filter in the off position for at least five (5) minutes prior to use of filters to reduce lead levels in the unfiltered water;
- provide specific considerations for pitcher filters including using the proper cartridges, installation requirements, and flushing the water line with the filter in the off position for at least five (5) minutes;
- continue and enhance public education on how to flush effectively and on proper filter installation and use;
- provide residents with additional information regarding filter use that can be directly attached to the filter;
- continue to provide access to cartridges certified to reduce lead;
- continue to improve corrosion control treatment in the water supply; and
- continue to replace lead service lines.

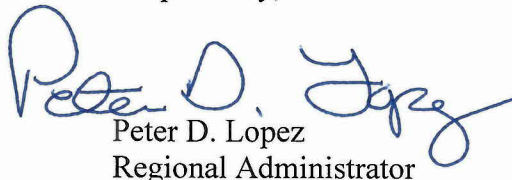
To this end, EPA commends the City's and State's intent to jointly advance a comprehensive outreach program to provide such necessary information and support to Newark residents. The Agency has also updated EPA's website regarding Newark's drinking water to directly link to EPA's educational materials regarding flushing and proper use of filters.

Again, these findings emphasize the importance of Newark's recommendation that residents both flush with the filter in the off position for at least five minutes and filter water with a properly installed and NSF-certified filter prior to use for drinking and cooking, until such time as the new corrosion control treatment becomes fully effective.

Please know that EPA remains dedicated to working collaboratively with NJDEP and Newark to support the longer-term solutions of optimizing the new corrosion control treatment for the Pequannock supply and replacing lead service lines. We fully understand that replacement of all lead service lines will take a number of years. EPA is encouraged by the recently announced bond issuance which will move those efforts forward at a faster pace. EPA is dedicated to continuing its work with Newark, NJDEP, our federal partners, and other stakeholders to find ways to help finance these accelerated efforts. We recognize that NJDEP has already made available to Newark over \$12 million in loans from the Safe Drinking Water State Revolving Fund. EPA is also strongly committed to continuing its work with Newark and NJDEP to strengthen the City's capacity to effectively address other identified deficiencies in its water system, and we are encouraged by the City's ongoing efforts to correct these concerns and to ensure the system complies with Safe Water Drinking Act requirements.

As always, please know that my door is open to you. We look forward to continuing our collaborative, constructive efforts to protect public health and the environment.

Respectfully,

  
Peter D. Lopez  
Regional Administrator

