PFAS Monitoring and Water Quality Testing Update

November 17, 2020 City Council Meeting

Background

- The EPA describes PFAS as a group of man-made chemicals that are manufactured and used in a variety of products, including: food wrappers, cooking utensils coated with Teflon, medical products, coatings, waterproofing materials related to textiles and clothing.
- The EPA began monitoring for PFAS in water as early as 2013
- In 2019 AB 756 allowed the State Water Board to begin requiring certain water sample for PFAS
- In September 2020, Monrovia received our first order to sample and monitor for PFAS.

Health Impacts from PFAS Exposure

The CDC has associated the following health risks with exposure to PFAS including reproductive and developmental, and immunological concerns including:

- Increased cholesterol levels
- Low infant birth weights
- Effects on the immune system
- Cancer
- Thyroid hormone disruption

- The source of the contamination is most likely the byproduct of the industrial production in which these chemicals are present.

PFAS Testing Order

- Pursuant to the 2019 Order, the State could require some, any or all of the public water systems within the State to perform this ordered testing.
- Based upon the results of initial monitoring beginning in 2019, the State expanded the monitoring requests to additional agencies, including Monrovia, to complete PFAS testing.
- On September 4, 2020, staff received an order from the Division of Drinking Water to begin monitoring our water sources for PFAS beginning in the fourth calendar quarter of 2020 and continuing indefinitely.

PFAS Testing Procedures

- For PFAS monitoring, water samples are taken directly from the City's production wells, before the water enters the treatment and distribution systems.
- The State is specifically requiring the testing for two specific substances, PFOA and PFOS. Testing is to be performed quarterly, using *parts per trillion* as the unit of measure
- The sampling for the City of Monrovia was completed by Stetson Engineers on October 12, 2020 and analyzed by Weck Laboratories, Inc.
- Staff received results from Stetson Engineers on October 26, 2020

Monrovia's Test Results

Water Source	PFOA Result	PFOS Result
Well 2	Non-detect	Non-detect
Well 3	5.5 ppt	7.3 ppt
Well 4	5.9 ppt	5.9 ppt
Well 5	6.2 ppt	7.3 ppt
Well 6	Non-detect	Non-detect

Level	PFOA Range	PFOS Range	Action
Detection	Greater than or Equal to 4.0 ppt	Greater than or Equal to 4.0 ppt	Continued Quarterly Monitoring; report in annual CCR
Notification	Greater than 5.1 ppt	Greater than 6.5 ppt	Notification of governing bodies; continued quarterly monitoring; report in annual CCR
Response	>10.00 ppt	>40.00 ppt	Shut down of water source; Full system public notification; Reactivation of water source will require appropriate water treatment

Test Result Analysis

- 3 of 5 water sources with detection of the PFAS substances within the **notification level**.
- As such, the City is providing notification to our governing body, as required, within 30 days from October 26, 2020 .
- Current levels are below well below the response level, where further action would be required.
- It is important to note that the City's water does remain within compliance for all drinking water standards.
- We are not the only agency to have similar results for PFAS in the area; there are other wells adjacent to ours that have had similar results.

Next Steps

- Staff has been in contact with Stetson Engineers, who serves as the Basin Engineers for the Main San Gabriel Basin, the source of all of our groundwater.
- Sampling will continue, every quarter, for at least a year to monitor the concentrations of PFAS substances.
- Required notifications are being made according to the Notification Level for the sampling results.
- Staff will work with Stetson to better understand both the background related to the presence of PFAS and what this would mean for our water system and treatment should numbers increase.

Next Steps

Staff recommends a strategy to proceed that includes:

- Completing the notifications as required
- Continuing with the required quarterly sampling to be able to analyze trends, and
- Conducting research and planning for possible needs should the current PFAS levels increase.

Staff will be coordinating with Stetson Engineers to better understand PFAS and work through what the next steps would look like, should levels increase.