

Memorandum

TO: HONORABLE MAYOR
AND CITY COUNCIL

FROM: Kerrie Romanow

SUBJECT: SEE BELOW

DATE: December 13, 2022

Approved



Date

12/13/22

INFORMATION

**SUBJECT: NOTIFICATION LEVEL EXCEEDANCE FOR
PERFLUOROHEXANESULFONIC ACID (PFHxS) AT SAN JOSE
MUNICIPAL WATER SYSTEM GROUNDWATER WELLS**

BACKGROUND

This memorandum updates City Council on the levels of one substance in the category commonly known as “PFAS” in the drinking water supply. The City of San José Municipal Water System’s supply meets safety standards, and no response is necessary. However, the State Water Resources Control Board Division of Drinking Water (DDW) recently established new Notification Level (NL) standards which require this report.

PFAS is a large class of chemicals known as perfluoroalkyl and polyfluoroalkyl substances. PFAS are human-made substances that do not occur naturally, and their presence in the environment is due to human activity. This memorandum addresses one specific PFAS chemical called perfluorohexanesulfonic acid (PFHxS). PFHxS has chemical characteristics that help lift and suspend soil or other particles. As a result, this compound has been used in numerous commercial products to offer water and stain-repellent properties and in fire-fighting foams. PFHxS is resistant to degradation and persists in the environment and in biological organisms. PFHxS adversely affects the growth and development in fetuses, infants, and young children.

A Maximum Contaminant Level is the maximum concentration of a chemical that is allowed in public drinking water systems. Maximum Contaminant Levels are adopted as regulations and are health protective drinking water standards to be met by public water systems. There are currently no federal or state Maximum Contaminant Levels for PFHxS or any other PFAS chemical.

On October 31, 2022, DDW established a NL of 3 ng/L (nanograms per liter) and Response Level (RL) of 20 ng/L for PFHxS.

NLs are nonregulatory, health-based advisory levels established by DDW for chemicals in drinking water that lack Maximum Contaminant Levels. Health and Safety Code Section

116455 requires drinking water systems to notify their governing body when a detected chemical exceeds its NL.

RLs are established in conjunction with the NL and represent the concentration of a drinking water contaminant at which additional steps, beyond notification, are recommended to reduce public exposure. Where detected levels exceed the RL for PFAS substances, including PFHxS, Health and Safety Code Section 116378 requires the public water system to either take the source out of service immediately; utilize treatment or blending; or provide public notification within 30 days of the confirmed detection.

ANALYSIS

San José Muni Water’s Evergreen service area is primarily supplied with treated surface water purchased from Santa Clara Valley Water District, supplemented by groundwater. During the first ten months of 2022, four groundwater wells have provided approximately 1% of the total potable water supply to the Evergreen area. Each well is currently run a few hours a week to keep it active and operational; however, well operation and run time can vary depending on water supply management needs, such as increasing groundwater pumping as necessary during treated water supply shortages that may occur during a drought.

PFAS is the subject of increasing regulation. In 2018, State Assembly Bill 756 provided DDW with specific and increased authority to issue general orders requiring public water systems to monitor for PFAS. DDW identifies specific water sources that require monitoring under a general order, and periodically updates the general order to include additional groundwater sources due to their proximity to locations where PFAS has been detected. San José Muni Water began monitoring for PFAS at the four Evergreen wells in November 2020 after the DDW issued a general order for the testing of 18 PFAS chemicals, including PFHxS, at these groundwater sources.

Table 1 shows PFHxS data for each Evergreen well and represents the average lab results for data collected between November 2020 and August 2022. Although this data collection occurred prior to DDW’s adoption of the NL and RL for PFHxS, staff is providing this data to ensure that City Council receives complete information.

Table 1. PFHxS levels (ng/L)	NL	RL	Average	Range
Evergreen Well 2 ¹	3.0	20.0	3.1	2.4 - 3.5
Evergreen Well 3 ¹			2.3	1.6 - 2.8
Evergreen Well 4 ¹			3.0	2.6 - 3.3
Evergreen Well 5 ²			3.8	3.6 - 4.1

¹ Represents average of data from 6 samples

² Monitoring began in March 2022 following completion of CIP project at well location; figures represent data from 3 samples

HONORABLE MAYOR AND CITY COUNCIL

December 13, 2022

Subject: Notification Level Exceedance for Perfluorohexanesulfonic Acid (PFHxS) at San José Municipal Water System Groundwater Wells

Page 3

On November 1, DDW issued a revised general order for PFAS sampling with an effective date of January 1, 2023, which adds source sampling for one additional San José Muni Water groundwater well located in the North San José/Alviso service area. Similar to the Evergreen service area, the groundwater wells in the North San José/Alviso service area supplement the primary potable water supply of treated surface water. Unlike Evergreen, however, water from San Francisco Public Utilities Commission primarily serves this area. This additional source will be monitored for PFAS beginning in the first quarter of 2023.

On November 7, staff collected samples for PFAS testing at Evergreen Well 3 and Evergreen Well 5 in accordance with a preset annual monitoring schedule. On December 1, staff was notified by the testing laboratory that PFHxS results for Well 3 and Well 5 were 2.8 ng/L and 3.1 ng/L, respectively. In accordance with the new NL requirements, staff provides City Council with this update on a NL exceedance. Evergreen Well 2 and Evergreen Well 4 are not due for next testing until the first quarter of 2023. Based on data collected to date as shown in Table 1, staff anticipates that the PFHxS levels at one or both of these sites may also exceed the NL but remain within the acceptable limits and do not require a response in accordance with RL requirements.

Staff will continue to follow all state regulations and may periodically return to City Council with further information. Staff is also developing website content and outreach material to provide customers with more information on PFAS chemicals.

/s/
KERRIE ROMANOW
Director, Environmental Services

For questions, please contact Jeffrey Provenzano, Deputy Director, at (408) 277-3671.