City of Mountain View

# COUNCIL REPORT

**DATE:** April 22, 2025

**CATEGORY:** Public Hearing

**DEPT.:** Public Works

**TITLE:** **Mountain View 2025 Water System Public Health Goals Report**

## RECOMMENDATION

1. Accept public comment regarding the City of Mountain View 2025 Water System Public Health Goals Report.

2. Approve the City of Mountain View's 2025 Water System Public Health Goals Report and direct staff to file the report with the California State Water Resources Control Board.

## BACKGROUND

The City of Mountain View (City) operates a drinking water system delivering an average of nine million gallons per day of water to residents and businesses within the City. Mountain View's drinking water supply sources include imported water from the San Francisco Public Utilities Commission (SFPUC) and Santa Clara Valley Water District (Valley Water), as well as groundwater from City-owned wells.

California Water Service Company (Cal Water) also operates a water system within the City, serving around 600 customers. Cal Water performs water quality monitoring and reporting for its system separately and provides this information on the Cal Water website.

As a domestic water purveyor, the City must test for contaminants in its drinking water system to comply with water quality requirements established by the U.S. Environmental Protection Agency (EPA) and the California State Water Resources Control Board (SWRCB). **The result of this testing is published in the City's annual Consumer Confident Report (Mountainview.gov/CCR) and demonstrates that the City's drinking water meets all standards established to protect public health.**

In addition to publishing water quality test results annually, the California Health and Safety Code requires water retailers serving more than 10,000 service connections, such as the City of Mountain View, to prepare a report every three years identifying any contaminants detected at levels that exceed Public Health Goals (PHGs) or Maximum Contaminant Level Goals (MCLGs).

This report is called the "PHG Report". It is important to note that the risk-based health goals included in the PHG Report are different from water quality standards required for drinking water. The following provides definitions of water quality "goals" and "standards" and an explanation of how they differ.

**Water Quality Goals**

The EPA and the California Office of Environmental Health Hazard Assessment (OEHHA) have water quality targets that are nonenforceable health-based goals. These include Public Health Goals and Maximum Contaminant Goals.

Public Health Goal (PHG): PHGs are nonenforceable goals established by the OEHHA and are based on health risk assessments. PHGs are not regulatory standards but are goals set at a level at which no known or anticipated adverse effects on health will occur with an adequate margin of safety. PHGs are established based on numerous criteria, including consideration of possible synergistic effects resulting from exposure to two or more contaminants, and consideration of potential adverse effects on members of subgroups that comprise a meaningful proportion of the population, including, but not limited to, infants, children, pregnant women, the elderly, and individuals with a history of serious illness. PHGs for cancer-causing contaminants are typically established at a risk level that one person in a population of one million people drinking the water daily for 70 years would be expected to develop cancer as a result of exposure to that contaminant.

State Law requires the SWRCB to set drinking water standards for chemical contaminants as close to the corresponding PHG as is economically and technologically feasible. PHGs adopted by the OEHHA are reviewed at least once every five years and revised as necessary based on the availability of new scientific data. There are no penalties for exceeding PHGs.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected health risk. MCLGs are set by the EPA and allow for a margin of safety. MCLGs are nonenforceable goals and there are no penalties or action required for exceeding an MCLG.

**Water Quality Standards**

Maximum Contaminant Level (MCL): MCLs are established by the EPA and SWRCB at the highest level of a contaminant that is allowed in drinking water. Primary MCLs (those that address health concerns) are set as close to PHGs (or MCLGs if no PHG exists) as is economically and technologically feasible. Secondary MCLs are set to address the odor, taste, and appearance of drinking water. MCLs established by the SWRCB must be at least as stringent as those established by the EPA, if one exists. **MCLs are enforceable regulatory water quality standards to which all public water systems must meet. The City of Mountain View's drinking water meets all MCLs.**

Requirements for PHG Exceedances

The content of the City's 2025 PHG report reflects guidance provided by OEHHA and reference material from the SWRCB. Many contaminants with established MCLs do not have corresponding PHGs; for these contaminants, the City is required to report on exceedances of MCLGs, if one exists. The City's last PHG report was published in May 2019 and included information on lead and gross alpha particles exceedances. There was no report in 2022 as there were no PHG exceedances from 2019 to 2021.

## ANALYSIS

The City regularly tests and monitors its drinking water, which met all primary and secondary water quality regulatory standards (MCLs) between 2022 and 2024, and the City incurred no water quality violations. To prepare the PHG report, the City reviewed 2022-2024 water quality monitoring data for the drinking water system to determine compliance with PHGs and MCLGs.

Routine water quality testing at four groundwater well sites identified one contaminant, hexavalent chromium, at levels exceeding the PHG of 0.02 parts per billion (ppb—but below the MCL of 10 ppb). To meet PHG regulatory requirements, the City must hold a public hearing and issue a Public Health Goals Report (Attachment 1). In accordance with State Law, the report must include the following elements:

- The identification of each contaminant detected in drinking water that exceeds the applicable PHG.
- The MCL and PHG (or MCLG) for each contaminant identified.
- The category or type of risk to health that could be associated with each contaminant.
- The best treatment technology commercially available, if any, that could be used to reduce or remove the contaminant, and an estimate of the cost to use that treatment if it is appropriate and feasible.
- A description of what action, if any, the City intends to take to reduce the concentration of the contaminant.

The public hearing and Public Health Goals Report fulfill all City PHG reporting requirements.

The required information included in the City's 2025 PHG report is summarized in the following table.

Contaminant: **Hexavalent Chromium**

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|---|---|
| Standards and goals | Goal - PHG 0.02 ppb<br>Standard - MCL: 10 ppb |
| Measured amounts | Hexavalent chromium levels exceeded the PHG at four potable groundwater wells, with measurements of 0.36 to 1.6 ppb. |
| Sources of contaminant | Hexavalent chromium is a soluble form of chromium and enters water from sources such as electroplating factories, leather tanneries, and textile manufacturing facilities. Hexavalent chromium is also naturally occurring and can enter groundwater from geologic formations that contain chromium. |
| Health risk | Hexavalent chromium has been known to cause cancer when inhaled and linked to cancer when ingested. |
| BAT to reduce | Anion Exchange treatment at groundwater wells |
| Estimated Cost to reduce | $48 million to construct; $9.6 million annually to operate and maintain |
| Source of cost estimate | SWRCB BAT for Hexavalent Chromium Treatment, Hazen & Sawyer 2013 Hexavalent Chromium BAT study |
| Steps to reduce contaminant levels | None planned. The City's water meets all health requirements being below the MCL of 10 ppb. |

**Hexavalent Chromium: Overview**

Hexavalent chromium, also known as chromium 6, is a heavy metal that is commonly found at low levels in drinking water. It can occur naturally but can also enter drinking water sources by historic leaks from industrial plants' hazardous waste sites. Various other sources also contribute to the amount of hexavalent chromium in groundwater. Chromium 6 is known to be a potent carcinogen when inhaled. It was found to also cause cancer in laboratory mice and rats that were exposed through drinking water.

In 2011, OEHHA set a final PHG for hexavalent chromium of 0.02 ppb. In 2014, the SWRCB adopted drinking water standards in the form of maximum contaminants levels (MCLs) for

hexavalent chromium in drinking water. Due to challenges to the SWRCB process used to set the 2014 MCL, in 2017 the Superior Court of Sacramento County invalidated the hexavalent chromium MCL and ordered the State Water Board to adopt a new MCL. In 2024, the SWRCB adopted the revised and current MCL set at 10 ppb.

**Hexavalent Chromium: Best Available Technologies**

Both the EPA and SWRCB identify Best Available Technologies (BATs) which are the best-known methods of reducing contaminant levels below the MCL. While a BAT may identify a process that can reduce the presence of a contaminant, there may not be commercially available technologies to reach levels below PHGs. Treatment is further complicated because it is often not possible to verify by analytical means that the contaminant has been totally eliminated. In some cases, installing a treatment technology to attempt to reduce very low levels of one contaminant may, in turn, have adverse effects on other aspects of water quality. Although there are several approved BATs for hexavalent chromium, the SWRCB has designated anion exchange as the BAT for hexavalent chromium.

The cost estimates for anion exchange treatment at City facilities were developed using the Hazen & Sawyer 2013 study cited in the SWRCB hexavalent chromium BAT report and adjusting to 2025 values. Since hexavalent chromium was detected above the PHG at four well sites, each site would require individual treatment systems. The estimated costs to implement anion exchange at one well site is approximately $12.0 million for construction and $2.4 million annually for operations and maintenance costs. Estimated costs for treatment at all four of the City's well sites would total $48.0 million for construction and $9.6 million annually for operations and maintenance. Additional costs not considered in these estimates are extensive feasibility studies, pilot testing, and potential land acquisitions. In addition, the Hazen & Sawyer study targeted a final hexavalent chromium treatment level of 1.0 ppb. Further treatment to lower levels of hexavalent chromium will have a substantial increase of capital and ongoing operations costs.

The City will continue to monitor and protect water sources as required by state and federal regulations. Because the hexavalent chromium levels are well below the MCL of 10 ppb, the City does not intend to implement additional treatment measures. The City's water supplies continuously meets all drinking water standards and is safe for consumption.

Cal Water customers can find water quality information on the Cal Water Los Altos Suburban website: https://www.calwater.com/district/los-altos-suburban/.

**FISCAL IMPACT**

Because there are no changes recommended for treating the City's water supplies, there is no financial impact from approving or filing this report.

## LEVINE ACT

California Government Code Section 84308 (also known as the Levine Act) prohibits city officials from participating in any proceeding involving a "license, permit, or other entitlement for use" if the official has received a campaign contribution exceeding $500 from a party, participant, or agent of a party or participant within the last 12 months. The Levine Act is intended to prevent financial influence on decisions that affect specific, identifiable persons or participants. For more information see the Fair Political Practices Commission website: www.fppc.ca.gov/learn/pay-to-play-limits-and-prohibitions.html

Please see below for information about whether the recommended action for this agenda item is subject to or exempt from the Levine Act.

**EXEMPT FROM THE LEVINE ACT**
☒ General policy and legislative actions

## CONCLUSION

The City's water meets all water primary and secondary quality standards established by the EPA and SWRCB. Hexavalent chromium levels in City wells are well below the MCL of 10 ppb and staff is recommending no changes to the City's current water treatment process. No further action is required after the Council approves the PHG report.

## ALTERNATIVES

1. Provide comments or changes to the PHG Report.

2. Provide other direction to staff.

**PUBLIC NOTICING**

Agenda posting and a notice of the public hearing was published in the *Daily Post*.

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MV/LL/4/CAM
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Attachment: 1. City of Mountain View 2025 Public Health Goals Report