West Valley Water District

2025 Public Health Goal Report

Report Prepared by
West Valley Water District

INTRODUCTION

Background

Under the Calderon-Sher Safe Drinking Water Act of 1996 (the Act), public water systems with more than 10,000 service connections are required to prepare a report every three years for contaminants that exceed their respective Public Health Goals (PHG). This document contains health risk information on drinking water contaminants to assist public water systems in preparing these reports. A PHG is the concentration of a contaminant in drinking water that poses no significant health risk if consumed for a lifetime. PHGs are developed and published by the Office of Environmental Health Hazard Assessment (OEHHA) using current risk assessment principles, practices, and methods.

The purpose of the PHG Report, as stated in Health and Safety Code (HSC) §116470, is to:

1. Identify each contaminant detected that exceeds the established PHG.
2. Disclose the numerical public health risk associated with contaminant levels associated with the maximum contaminant level (MCL) and PHG. Numerical public health risks are determined by OEHHA (HSC §116365).
3. Identify the category of risk to public health associated with exposure to the contaminant in drinking water.
4. Describe the best available technology (BAT), if commercially available, that could remove or reduce contaminants that exceeded the PHGs.
5. Provide an estimated total cost and cost per customer for implementing the best available technology to reduce the contaminant concentration at a level equal to or below the PHG.
6. Describe the action that will be taken by the water system to reduce the contaminant concentration, if any, and the reasoning for that decision.

West Valley Water District (WVWD) has prepared the 2025 PHG Report to comply with the requirements of HSC §116470. Only contaminants that have a primary drinking water standard (PDWS) MCL, were detected at levels above the detection limit for purposes of reporting (DLR) requirements are included in this report.

WHAT ARE PHGs?

PHGs are set by the California Office of Environmental Health Hazard Assessment (OEHHA) which is a part of Cal-EPA and are based solely on public health risk considerations. None of the practical risk-management factors that are considered by the US EPA or the California Division of Drinking Water in setting drinking water standards (MCLs) are considered in setting the PHGs. These factors include analytical detection capability, treatment technology available, benefits and costs. The PHGs are not enforceable and are not required to be met by any public water system. MCLGs are the federal equivalent to PHGs. MCLs are the highest level of contaminants allowed in drinking water. PDWS MCLs are set as close to PHGs or MCLGs as

economically and technologically feasible and are set for contaminants that affect health. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

Water Quality Data Considered

For the 2025 PHG Report, WVWD has considered and evaluated all water quality data from 2022 to 2024. Summaries of this data can be viewed in the 2022, 2023, and 2024 Water Quality Reports which were made available to all WVWD customers. Water Quality Reports can be viewed at WVWD's website through the following link Transparency | West Valley Water District.

Guidelines Followed

The Association of California Water Agencies (ACWA) formed a workgroup, which prepared guidelines for water utilities to use in preparing PHG reports. ACWA's April 2025 Public Health Goals Report Guidelines were used in preparation of our report. No guidance was available from state regulatory agencies.

Best Available Treatment Technology and Cost Estimates

Both the USEPA and DDW adopt what are known as Best Available Technologies (BATs), which are the best known methods of reducing contaminant levels to the MCL. Costs can be estimated for such technologies. However, since many PHGs and all MCLGs are set much lower than the MCL, it is not always possible or feasible to determine what treatment is needed to further reduce a constituent down to or near the PHG or MCLG, many of which are set at zero. Estimating the costs to reduce a constituent to zero is difficult, if not impossible, because it is not possible to verify by analytical means that the level has been lowered to zero. In some cases, installing treatment to try and further reduce very low levels of one constituent may have adverse effects on other aspects of water quality.

Please note, all cost estimates provided in this report are highly speculative and theoretical, and actual costs can be far greater. Estimated costs include annualized capital, operations, and maintenance costs. ACWA's Cost Estimates for Treatment Technologies were used to determine the estimated costs. All costs were estimated based on water production from 2022 to 2024 for each of the sources that exceeded the PHG or MCLG.

Constituents Detected that Exceed a PHG or MCLG

The following is a discussion of contaminants that were detected in one or more of our drinking water sources at levels above the PHG or, if no PHG, above the MCLG.

Inorganic Contaminants

Arsenic

The source of arsenic in water supplies is mainly from erosion of natural deposits, runoff from orchards, and glass and electronic production wastes. The PHG for arsenic is 0.004 µg/L and the MCL is 10 µg/L. Arsenic has been detected at levels above the PHG in our groundwater wells, groundwater treatment plant and our surface water treatment plant. Detected levels of arsenic were below the MCL at all times. WVWD is in full compliance with arsenic drinking water standards. The maximum arsenic concentrations for the sources were as follows:

1. Roemer Plant Effluent – 2.2 µg/L
2. Baseline Feeder Wells – 0.88 µg/L
3. Well 1A – 12 µg/L (Confirmation sample = 4.4 µg/L)
4. Well 4A – 8.6 µg/L (This well is part of a blending plan to reduce Arsenic levels for distribution)
5. Well 5A – 3.4 µg/L
6. Well 8A – 4.8 µg/L
7. Well 24 – 1.5 µg/L
8. Well 15 – 1.2 µg/L
9. Well 30 – 1.9 µg/L
10. Well 41 – 1.7 µg/L
11. Well 42 Treated – 1.1 µg/L
12. Well 54 – 0.65 µg/L

Category of Health Risk
The category of health risk associated with arsenic and the reason that a drinking water standard was adopted for it is that some people who drink water containing arsenic in excess of the MCL over many years may experience skin damage or circulatory system problems and may have an increased risk of getting cancer (CCR, Title 22, Appendix 64465-D).

Numerical Health Risk
The numerical health risk for arsenic at the PHG of 0.004 µg/L is one excess cancer case per million people over a lifetime of exposure. The numerical health risk for arsenic at the MCL of 10 µg/L is 2.5 excess cancer cases per 1,000 people over a lifetime of exposure.

BATs and Estimated Cost
Based on CCR, Title 22, Table 64447.2-A – BATs for lowering arsenic below the PHG are:

- Activated Alumina
- Coagulation/Flocculation
- Ion Exchange
- Lime Softening
- Reverse Osmosis
- Electrodialysis
- Oxidation/Filtration

Since arsenic concentrations are already below the MCL, implementing BAT is not required, however, we have an approved blending plan in place for Well 4A. The estimated cost to install and operate BATs listed for reducing arsenic concentrations below the PHG range from an annual cost of $10,657,936.79 to $57,126,541.19. The annual cost per service connection, or per customer, would range from $423.64 to $2,270.71.

Cadmium

The source of cadmium in water supplies is mainly from corrosion of galvanized pipes, erosion of natural deposits, discharge from electroplating and industrial chemical factories, metal refineries, runoff from waste batteries and paints. The PHG for cadmium is 0.04 µg/L and the MCL is 5 µg/L. Cadmium has been detected at levels above the PHG in our groundwater wells and our surface water treatment plant. Detected levels of cadmium were below the MCL at all times. WVWD is in full compliance with cadmium drinking water standards. The maximum cadmium concentrations for the sources were as follows:

1. Baseline Feeder Well – 0.14 µg/L
2. Roemer Surface Water Treatment – 0.18 µg/L
3. Well 8A – 0.21 µg/L
4. Well 30 – 0.11 µg/L
5. Well 41 – 0.16 µg/L
6. Well 42 – 0.24 µg/L

Category of Health Risk
The category of health risk associated with cadmium and the reason that a drinking water standard was adopted for it is that some people who drink water containing cadmium in excess of the MCL over many years may experience kidney damage (CCR, Title 22, Appendix 64465-D).

Numerical Health Risk
OEHHA is required to provide numerical health risk information but has not done so in time to include it in this report.

BATs and Estimated Cost
Based on CCR, Title 22, Table 64447.2-A – BATs for lowering cadmium below the PHG are:

- Coagulation/Flocculation
- Ion Exchange
- Lime Softening
- Reverse Osmosis

Since cadmium concentrations are already below the MCL, implementing BAT is not required. The estimated cost to install and operate BATs listed for reducing cadmium concentrations below the PHG range from an annual cost of $35,905,084.08 to $131,214,108.08. The annual cost per service connection, or per customer, would range from $1,427.18 to $5,215.60.

Chromium, hexavalent

The source of hexavalent chromium in water supplies is mainly from the erosion of natural deposits; transformation of naturally occurring trivalent chromium to hexavalent chromium by natural processes and human activities such as discharges from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities. The PHG for hexavalent chromium is 0.02 µg/L and the MCL is 10 µg/L. Hexavalent chromium has been detected at levels above the PHG in our groundwater wells and our surface water treatment plant. Detected levels of hexavalent chromium were below the MCL at all times. WVWD is in full compliance with hexavalent

chromium drinking water standards. The maximum hexavalent chromium concentrations for the sources were as follows:

1. Roemer Surface Water Treatment Plant – 0.18 µg/L
2. FBR Groundwater Treatment Plant – 1.6 µg/L
3. Well 1A – 1.0 µg/L
4. Well 4A – 0.60 µg/L
5. Well 5A – 0.59 µg/L
6. Well 8A – 1.6 µg/L
7. Well 15 – 1.3 µg/L
8. Well 24 – 0.29 µg/L
9. Well 30 – 0.76 µg/L
10. Well 41 – 2.1 µg/L
11. Well 42 – 2.3 µg/L

Category of Health Risk
The category of health risk associated with hexavalent chromium and the reason that a drinking water standard was adopted for it is that some people who drink water containing hexavalent chromium in excess of the MCL over many years may have an increased risk of getting cancer (SWRCB DDW CCR Reference Manual, Appendix A).

Numerical Health Risk
The numerical health risk for hexavalent chromium at the PHG of 0.02 µg/L is one excess cancer case per one million people over a lifetime of exposure. The numerical health risk for hexavalent chromium at the MCL of 10 µg/L is five excess cancer cases per 10,000 people over a lifetime of exposure.

BATs and Estimated Cost
Based on CCR, Title 22, Table 64447.2-A – BATs for lowering hexavalent chromium below the PHG are:

- Coagulation/Flocculation
- Ion Exchange
- Lime Softening
- Reverse Osmosis

Since hexavalent chromium concentrations are already below the MCL, implementing BAT is not required. The estimated cost to install and operate BATs listed for reducing hexavalent chromium concentrations below the PHG range from an annual cost of $39,336,710.12 to $164,531,627.71. The annual cost per service connection, or per customer, would range from $1,563.59 to $6,539.93.

Lead

The source of lead in water supplies is mainly from internal corrosion of household water plumbing systems, discharges from industrial manufacturers, and erosion of natural deposits. The PHG for lead is 0.2 µg/L and the MCL has an Action Level (AL) of 15 µg/L. The AL is the level of concentration of a harmful or toxic substance or contaminant that, when exceeded, is considered sufficient to warrant regulatory or remedial action. Lead has been detected in the Baseline Feeder groundwater wells and Roemer Surface Water Treatment Plant between 2022 and 2024. Detected levels of lead were below the MCL at all times.

WVWD is in full compliance with lead drinking water standards. The maximum lead concentrations for the sources are as follows:

1. Baseline Feeder – 0.51 µg/L
2. Roemer – 1.3 µg/L

Category of Health Risk
The category of health risk associated with lead and the reason a drinking water standard was adopted for it is that infants and children who drink water containing lead in excess of the action level may experience delays in their physical or mental development. Children may show slight deficits in attention span and learning abilities. Adults who drink this water over many years may develop kidney problems or high blood pressure (22 CCR, Appendix 64465-D).

Numerical Health Risk
The numerical health risk for lead at the PHG of 0.2 µg/L is less than one in one million adults over a lifetime of exposure. The numerical health risk for lead at the AL of 15 µg/L is two cases per one million adults over a lifetime of exposure. There are no available numerical health risks factors for the effects on infants or children.

BATs and Estimated Cost
While not precisely stated in the regulations, the best available technology for lead is optimized corrosion control (ACWA's April 2025 PHG Report Guidance) until lead plumbing can be replaced. West Valley Water District already monitors the corrosivity of the water we provide to our customers and optimizes corrosion control.

Since lead concentrations are already below the MCL, implementing BAT is not required. The estimated cost to install and operate BATs for reducing lead concentrations below the PHG has an annual cost of approximately $1,033,972.37. The annual cost per service connection, or per customer, would be approximately $41.10.

Perchlorate

Perchlorate is an inorganic chemical used in solid rocket propellant, fireworks, explosives, flares, matches, and a variety of industries. It usually gets into drinking water as a result of environmental contamination from historic aerospace or other industrial operations that used or use, store or dispose of perchlorate and its salts. The PHG for perchlorate is 1 µg/L and the MCL is 6 µg/L. Perchlorate has been detected at levels above the PHG in two sources wells between 2022 and 2024. Detected levels of perchlorate were below the MCL at all times. WVWD is in full compliance with perchlorate drinking water standards. The maximum perchlorate levels for the sources are as follows:

1. FBR Groundwater Treatment Plant – 2.5 µg/L
2. Well 42 (Treated) – 1.5 µg/L

Category of Health Risk

Perchlorate has been shown to interfere with uptake of iodide by the thyroid gland, and to thereby reduce the production of thyroid hormones, leading to adverse effects associated with inadequate hormone levels. Thyroid hormones are needed for normal growth and development in the infant and child. In

adults, thyroid hormones are needed for normal metabolism and mental function (22 CCR, Appendix 64465-D).

Numerical Health Risk
OEHHA is required to provide numerical health risk information but has not done so in time to include it in this report.

BAT and Estimated Cost
Based on CCR, Title 22, Table 6447.2-A – BATs for lowering perchlorate below the PHG are:

- Ion exchange
- Biological Fluidized Bed Reactor

WVWD provides Ion Exchange for the removal of perchlorate for Well 42. In addition, WVWD uses the Fluidized Bed Reactor (FBR) groundwater treatment plant for the removal of perchlorate. The estimated cost for additional treatment to reduce perchlorate concentrations below the PHG range from an annual cost of $1,732,824.50 to $5,426,476.72. The annual cost per service connection, or per customer would range from $68.88 to $215.70.

Thallium

The major sources of thallium in drinking water comes from leaching from ore-processing sites, discharge from electronics, glass and drug factories. The PHG for Thallium is 0.1 µg/L and the MCL is 2 µg/L. Thallium has been detected at levels above the PHG in five sources wells between 2022 and 2024. Detected levels of thallium were below the MCL at all times. WVWD is in full compliance with thallium drinking water standards. The maximum thallium sources are as follows:

1. Baseline Feeder – 0.44 µg/L
2. Roemer Surface Water Treatment Plant – 0.44 µg/L
3. Well 8A – 0.27 µg/L
4. Well 41 – 0.34 µg/L
5. Well 42 (treated) – 0.38 µg/L

Category of Health Risk
The category of health risk associated with thallium and the reason a drinking water standard was adopted for it is that some people who drink water containing thallium in excess of the MCL over many years may experience hair loss, changes in their blood, or kidney, intestinal or liver problems (22 CCR, Appendix 64465-D).

Numerical Health Risk
OEHHA is required to provide numerical health risk information but has not done so in time to include it in this report.

BAT and Estimated Cost
Based on CCR, Title 22, Table 6447.2-A – BATs for lowering perchlorate below the PHG are:

- Activated Alumina
- Ion Exchange

Since thallium concentrations are already below the MCL, implementing BAT is not required. The estimated cost to install and operate BATs listed for reducing thallium concentrations below the PHG is approximately $37,116,134.42. The annual cost per service connection, or per customer, would be approximately $1,475.32.

Volatile Organic Compound Contaminants

Tetrachloroethylene (PCE)

The source of PCE in water supplies is mainly from discharge from factories, dry cleaners and auto shops (metal degreaser). The PHG for PCE is 0.06 µg/L and the MCL is 5 µg/L. PCE has been detected at levels above the PHG in three sources between 2022 and 2024. Detected levels of PCE were below the MCL at all times. WVWD is in full compliance with PCE drinking water standards. The maximum PCE levels for the wells are as follows:

1. Baseline Feeder – 1.1 µg/L
2. Well 15 – 0.57 µg/L
3. Well 42 – 0.71 µg/L

Category of Health Risk
The category of health risk associated with PCE and the reason that a drinking water standard was adopted for it is that some people who drink water containing PCE in excess of the MCL over many years may experience liver problems and have an increased risk of getting cancer. (22 CCR, Appendix 64465-E).

Numerical Health Risk
The numerical health risk for PCE at the PHG of 0.06 µg/L is one excess cancer case per million people over a lifetime of exposure. The numerical health risk for PCE at the MCL of 5 µg/L is eight excess cancer cases per one hundred thousand people over a lifetime of exposure.

BATs and Estimated Cost
Based on CCR, Title 22, Table 64447.4-A – BATs for lowering PCE below the PHG are:

- Granular activated carbon (GAC)
- Packed tower aeration

Since PCE concentrations are already below the MCL, implementing BAT is not required. The estimated cost to install and operate the BATs for reducing PCE concentrations below the PHG range from an annual cost of $2,412,884.84 to $3,887,425.58. The annual cost per service connection, or per customer, would range from $95.91 to $154.52.

Radiological Contaminants

Gross Alpha Particle Activity

Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. The source of gross alpha particle activity in water supplies is mainly from the erosion of natural deposits. A PHG for gross alpha particles has not been established. The MCLG for gross alpha particles is 0 pCi/L and the MCL is 15 pCi/L. Gross alpha particles have been detected above the MCLG between 2022 and 2024 in three sources. Detected levels of gross alpha particles were below the MCL at all times. WVWD is in full compliance with gross alpha particle drinking water standards. The maximum gross alpha particle concentrations for the sources were as follows:

1. Roemer Surface Water Treatment – 2.8 pCi/L
2. FBR – 3.9 pCi/L
3. Baseline Feeder – 3.5 pCi/L

Category of Health Risk
The category of health risk associated with gross alpha particles and the reason that a drinking water standard was adopted for it is that some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer (22 CCR, Appendix 64465-C).

Numerical Health Risk
The numerical health risk for gross alpha particles at the MCLG of 0 pCi/L is zero. The numerical health risk for gross alpha particles at the MCL of 15 pCi/L is one excess cancer case per one thousand people over a lifetime of exposure.

BAT and Estimated Cost
Based on CCR, Title 22, Table 64447.3-A – BAT for lowering gross alpha particle activity below the PHG is reverse osmosis. Since gross alpha particle activity are already below the MCL, implementing BAT is not required. The estimated cost to install and operate the BAT for reducing gross alpha particle activity concentrations below the PHG range from an annual cost of $14,708,442.94 to $60,934,977.91. The annual cost per service connection, or per customer, would range from $584.64 to $2,422.09.

Radium 226

The source of Radium 226 in water supplies is mainly from the erosion of natural deposits. A PHG for Radium 226 is 0.05 pCi/L and the MCL is 5 pCi/L (combined $Ra^{226+228}$). Radium 226 has been detected above the PHG between 2022 and 2024 at our FBR Groundwater Treatment Plant. Detected levels of Radium 226 were below the MCL at all times. WVWD is in full compliance with Radium 226 drinking water standards. Radium 226 was detected at the FBR at a maximum concentration of 0.38 pCi/L.

Category of Health Risk
The category of health risk associated with Radium 226 and the reason that a drinking water standard was adopted for it is that some people who drink water containing Radium 226 in excess of the MCL over many years may have an increased risk of getting cancer (22 CCR, Appendix 64465-C).

Numerical Health Risk
The numerical health risk for Radium 226 at the PHG of 0.05 pCi/L is one excess cancer case per one million people over a lifetime of exposure. The numerical health risk for Radium 226 at the MCL of 5 pCi/L is one excess cancer case per ten thousand people over a lifetime of exposure.

BAT and Estimated Cost

Based on CCR, Title 22, Table 6447.3-A – BAT for lowering Radium-226 below the PHG are:

- Ion exchange
- Reverse osmosis
- Lime softening

Since Radium-226 is already below the MCL, implementing BAT is not required. The estimated cost to install and operate the BAT for reducing Radium-226 concentrations below the PHG range from an annual cost of $1,323,777.34 to $5,848,220.43. The annual cost per service connection, or per customer, would range from $52.62 to $217.99.

Radium 228

The source of Radium 228 in water supplies is mainly from the erosion of natural deposits. A PHG for Radium 228 is 0.019 pCi/L and the MCL is 5 pCi/L (combined $Ra^{226+228}$). Radium 228 has been detected above the PHG between 2022 and 2024 in our FBR Groundwater Treatment Plant. Detected levels of Radium 228 were below the MCL at all times. WVWD is in full compliance with Radium 228 drinking water standards. The maximum Radium 228 concentrations for the FBR is 1.8 pCi/L.

Category of Health Risk
The category of health risk associated with Radium 228 and the reason that a drinking water standard was adopted for it is that some people who drink water containing Radium 228 in excess of the MCL over many years may have an increased risk of getting cancer (22 CCR, Appendix 64465-C).

Numerical Health Risk
The numerical health risk for Radium 228 at the PHG of 0.019 pCi/L is one excess cancer case per one million people over a lifetime of exposure. The numerical health risk for Radium 228 at the MCL of 5 pCi/L (combined $Ra^{226+228}$) is three excess cancer cases per ten thousand people over a lifetime of exposure.

BAT and Estimated Cost
Based on CCR, Title 22, Table 64447.3-A – BAT for lowering Radium 228 below the PHG are:

- Ion exchange
- Reverse osmosis
- Lime softening

Since Radium 228 is already below the MCL, implementing BAT is not required. The estimated cost to install and operate the BAT for reducing Radium 228 concentrations below the PHG range from an annual cost of $1,323,777.34 to $5,484,220.43. The annual cost per service connection, or per customer, would range from $52.62 to $217.99.

Uranium

The source of uranium in water supplies is mainly from the erosion of natural deposits. The PHG for uranium is 0.43 pCi/L and the MCL is 20 pCi/L. Uranium has been detected at levels above the PHG between 2022 and 2024 in FBR Groundwater Treatment Plant. Detected levels of uranium were below

the MCL at all times. WVWD is in full compliance with uranium drinking water standards. The uranium concentrations at our groundwater treatment plant is 3.4 pCI/L.

Category of Health Risk
The category of health risk with uranium and the reason that a drinking water standard was adopted for it is that some people who drink water containing uranium in excess of the MCL over many years may have kidney problems or an increased risk of getting cancer (22 CCR, Table 64465-C).

Numerical Health Risk
The numerical health risk for uranium at the PHG of 0.43 pCi/L is one excess cancer case per million people over a lifetime of exposure. The numerical health risk for uranium at the MCL of 20 pCi/L is five excess cancer cases per one hundred thousand people over a lifetime of exposure.

BAT and Estimated Cost
Based on CCR, Title 22, Table 64447.3-A – BAT for lowering uranium below the PHG is reverse osmosis. Other BATs exist, however, since some of the same wells have gross alpha particle activity above the PHG, and only reverse osmosis is listed as a BAT for gross alpha particles, no other BATs were considered. Uranium concentrations are already below the MCL, so implementing BAT is not required. The estimated cost to install and operate the BAT for reducing uranium concentrations below the PHG range from an annual cost of $1,323,777.34 to $5,484,220.43. The annual cost per service connection, or per customer would range from $52.62 to $217.99.

Polyfluoroalkyl Substances (PFAS) Contaminants

Perfluorooctanesulfonic sulfonate (PFOS)

The source of PFOS in water supplies is mainly from industrial facilities, landfills, treatment plants, stain-resistant carpeting, nonstick cookware, grease and waterproof food packaging, fabric softeners, waterproof clothing, cosmetics. The PHG for PFOS is 1 ng/L. The Notification Level (NL) for PFOS is 6.5 ng/L and the Action Level (AL) is 40 ng/L. Both the NL and AL are monitored based on the Quarterly Running Annual Average (QRAA). PFOS has been detected at levels above the PHG in three sources between 2022 and 2024. Detected levels of PFOS were below the AL at all times. WVWD is in full compliance with PFOS drinking water standards. The maximum PFOS levels for the wells are as follows:

1. FBR – 2.0 ng/L
2. Well 5A – 1.5 ng/L
3. Well 41 – 8.3 ng/L (removed to ND through IX)

Category of Health Risk
The category of health risk associated with PFOS and the reason that a drinking water standard was adopted for it is that PFOS exposure resulted in immune suppression and cancer in laboratory animals. (CCR-Reference Manual 2025, Appendix D).

Numerical Health Risk
The numerical health risk for PFOS at the PHG of 1 ng/L is one excess cancer case per million people over a lifetime of exposure. OEHHA is required to provide numerical health risk information but did not have one available for the AL in time to include it in this report.

BAT and Estimated Cost
Based on the EPA website Reducing PFAS in Drinking Water with Treatment Technologies | US EPA below the PHG are:

- Ion Exchange
- Granulated Activated Carbon (GAC)
- Reverse Osmosis (RO)

Since PFOS concentrations are already below the AL, implementing BAT is not required. The estimated cost to install and operate the BATs for reducing PFOS concentrations below the PHG range from an annual cost of $775,318.32 to $9,368,429.71. The annual cost per service connection, or per customer, would range from $30.82 to $372.38.

Perfluorooctanioc Acid (PFOA)

The source of PFOA in water supplies is mainly from industrial facilities, landfills, treatment plants, stain-resistant carpeting, nonstick cookware, grease and waterproof food packaging, fabric softeners, waterproof clothing, cosmetics. The PHG for PFOA is 0.007 ng/L. The Notification Level (NL) for PFOA is 5.1 ng/L and the Response Level (RL) is 10 ng/L based on the QRAA. PFOA has been detected at levels above the PHG in three sources between 2022 and 2024. Detected levels of PFOA were below the RL at all times. WVWD is in full compliance with PFOA drinking water standards. The maximum PFOA levels for the wells are as follows:

1. FBR – 3.8 ng/L
2. Well 5A – 6.2 ng/L
3. Well 41 – 5.9 ng/L (removed to ND through IX)

Category of Health Risk
The category of health risk associated with PFOS and the reason that a drinking water standard was adopted for it is that Perfluorooctanoic Acid exposures resulted in increased liver weight and cancer in laboratory animals. (CCR-Reference Manual 2025, Appendix D).

Numerical Health Risk
The numerical health risk for PFOA at the PHG of 0.07 ng/L is one excess cancer case per million people over a lifetime of exposure. OEHHA is required to provide numerical health risk information but did not have one available for the AL in time to include it in this report.

BAT and Estimated Cost
Based on the EPA website Reducing PFAS in Drinking Water with Treatment Technologies | US EPA below the PHG are:

- Ion Exchange
- Granulated Activated Carbon (GAC)
- Reverse Osmosis (RO)

Since PFOA concentrations are already below the AL, implementing BAT is not required. The estimated cost to install and operate the BATs for reducing PFOA concentrations below the PHG range from an

annual cost of $775,318.32 to $9,368,429.71. The annual cost per service connection, or per customer, would range from $30.82 to $372.38.

RECOMMENDATIONS FOR FURTHER ACTION

The drinking water quality of West Valley Water District meets all State of California, DDW and US EPA Drinking Water Standards set to protect public health. To further reduce the levels of the constituents identified in this report that are already significantly below the health-based Maximum Contaminant Levels established to provide “safe drinking water”, additional costly treatment processes would be required. The effectiveness of the treatment process to provide any significant reductions in constituent levels at these already low values is uncertain. The health protection benefits of these further hypothetical reductions are not at all clear and may not be quantifiable. The money that would be required for these additional treatment processes might provide greater public health protection benefits if spent on other water system operations, surveillance, and monitoring programs. Therefore, no action is proposed, except to continue meeting all State of California, DDW and USEPA Drinking Water Standards set forth to protect public health.