

2023 Consumer Confidence Report

Water System Information

Water System Name: Phillips 66

Report Date: June 10, 2024

Type of Water Source(s) in Use: Well Water

Name and General Location of Source(s): Wells #2, #4, and #5 are located within the Santa Maria Refinery. Well #2 is near Tank 553, Well #4 is between "F" Street and Tank 800, and Well #5 is between the Carbon Plant access road and the Maintenance contractor building.

Drinking Water Source Assessment Information: A source water assessment was conducted for Wells 02, 04 and 05 of the Phillips 66 (ConocoPhillips /Phillips 66/Tosco Refining) water system in November 2002. No contaminants have been detected in the water supply; however, the source is considered most vulnerable to the following activities:

Chemical/petroleum processing/storage.

A copy of the complete assessment may be viewed at:

County of San Luis Obispo, Environmental Health Services
2156 Sierra Way, San Luis Obispo, CA 93401

You may request a summary of the assessment be sent to you by contacting Environmental Health Services at 805-781-5544.

Time and Place of Regularly Scheduled Board Meetings for Public Participation: The schedule for Central Coast Regional Water Quality Control Board's public meetings can be found at https://www.waterboards.ca.gov/centralcoast/board_info/agendas/

For More Information, Contact: Tomas Zambrano, 510-245-5879

About This Report

We test the drinking water quality for many constituents as required by state and federal regulations. This report shows the results of our monitoring for the period of January 1 to December 31, 2023, and may include earlier monitoring data.

Este informe contiene información muy importante sobre su agua para beber. Favor de comunicarse Phillips 66, Santa Maria Refinery a (805) 343-1776 para asistirlo en español.

Terms Used in This Report

Term	Definition
Level 1 Assessment	A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.
Level 2 Assessment	A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an <i>E. coli</i> MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.
Maximum Contaminant Level (MCL)	The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.
Maximum Contaminant Level Goal (MCLG)	The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency (U.S. EPA).
Maximum Residual Disinfectant Level (MRDL)	The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
Maximum Residual Disinfectant Level Goal (MRDLG)	The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
Primary Drinking Water Standards (PDWS)	MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.
Public Health Goal (PHG)	The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.
Regulatory Action Level (AL)	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
Secondary Drinking Water Standards (SDWS)	MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.
Treatment Technique (TT)	A required process intended to reduce the level of a contaminant in drinking water.
Variances and Exemptions	Permissions from the State Water Resources Control Board (State Board) to exceed an MCL or not comply with a treatment technique under certain conditions.
ND	Not detectable at testing limit.
ppm	parts per million or milligrams per liter (mg/L)
ppb	parts per billion or micrograms per liter (µg/L)
ppt	parts per trillion or nanograms per liter (ng/L)
ppq	parts per quadrillion or picogram per liter (pg/L)
pCi/L	picocuries per liter (a measure of radiation)

Sources of Drinking Water and Contaminants that May Be Present in Source Water

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, that can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

- Pesticides and herbicides, that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
- Radioactive contaminants, that can be naturally-occurring or be the result of oil and gas production and mining activities.

Regulation of Drinking Water and Bottled Water Quality

In order to ensure that tap water is safe to drink, the U.S. EPA and the State Board prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration regulations and California law also establish limits for contaminants in bottled water that provide the same protection for public health.

About Your Drinking Water Quality

Drinking Water Contaminants Detected

Tables 1, 1A, 2, 3, 4, 5, and 6 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The State Board allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, are more than one year old. Any violation of an AL, MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.

Table 1. Sampling Results Showing the Detection of Coliform Bacteria

Complete if bacteria are detected.

Microbiological Contaminants	Highest No. of Detections	No. of Months in Violation	MCL	MCLG	Typical Source of Bacteria
<i>E. coli</i>	(in the year) 0	0	(a)	0	Human and animal fecal waste

(a) Routine and repeat samples are total coliform-positive and either is *E. coli*-positive or system fails to take repeat samples following *E. coli*-positive routine sample or system fails to analyze total coliform-positive repeat sample for *E. coli*.

Table 1A. Compliance with Total Coliform MCL Between January 1, 2023, and June 30, 2023 (Inclusive)

Microbiological Contaminants	Highest No. of Detections	No. of Months in Violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria	(In a mo.) 0	0	1 positive monthly sample (a)	0	Naturally present in the environment
Fecal Coliform or <i>E. coli</i>	(In the year) 0	0	0	None	Human and animal fecal waste

(a) For systems collecting fewer than 40 samples per month: two or more positive monthly samples is a violation of the total coliform MCL.

Table 2. Sampling Results Showing the Detection of Lead and Copper

Lead and Copper	Sample Date	No. of Samples Collected	90 th Percentile Level Detected	No. Sites Exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	9/28/2021	15	<1.0	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	9/28/2021	15	0.090	0	1.3	0.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

Table 3. Sampling Results for Sodium and Hardness

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	3/29/2017	82	64-100	None	None	Salt present in the water and is generally naturally occurring
Hardness (ppm)	3/29/2017	547	430-670	None	None	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

Table 4. Detection of Contaminants with a Primary Drinking Water Standard

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Nitrate (as nitrogen, N) (ppm)	3/6/2023	3.3	0.55-5.0	10	N/A	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits.
Nitrate + Nitrite (sum as nitrogen) (ppm)	3/6/2023	3.4	0.56-5.1	10	N/A	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits.
Aluminum (ppm)	2021 & 2023	0.047	<0.020-0.140	1	N/A	Erosion of natural deposits; residue from some surface water treatment processes
Fluoride (ppm)	3/6/2023	0.15	0.051-0.25	2	N/A	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories

Table 5. Detection of Contaminants with a Secondary Drinking Water Standard

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	SMCL	PHG (MCLG)	Typical Source of Contaminant
Aluminum (ppb)	2021 & 2023	46.7	<20-140	1000	N/A	Erosion of natural deposits; residue from some surface water treatment processes
Color (Units)	2017	1.3	1.0 – 2.0	15	N/A	Naturally-occurring organic materials
Iron (ppb)	2017 & 2021	183	<50 - 550	300	N/A	Leaching from natural deposits; industrial wastes
Turbidity (Units, NTU)	2017 & 2021	1.5	0.18 – 3.2	5	N/A	Soil runoff

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	SMCL	PHG (MCLG)	Typical Source of Contaminant
Total Dissolved Solids (TDS) (ppm)	2017	863	690 - 980	1000	N/A	Runoff/leaching from natural deposits
Specific Conductance (micromhos/cm)	2017	1165	925 - 1300	1600	N/A	Substances that form ions when in water; seawater influence
Chloride (ppm)	2017	69	41 - 120	500	N/A	Runoff/leaching from natural deposits; seawater influence
Sulfate (ppm)	2017	380	290 - 480	500	N/A	Runoff/leaching from natural deposits; industrial wastes

Table 6. Detection of Unregulated Contaminants

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	Notification Level	Health Effects
None	---	N/A	---	---	N/A

Additional General Information on Drinking Water

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. U.S. EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Santa Maria Refinery is responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at <http://www.epa.gov/lead>.

Nitrate in drinking water at levels above 10 mg/L is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 10 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant woman and those with specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider.

Secondary Drinking Water Standards listed in Table 5 are non-mandatory guidelines to assist water systems in managing their drinking water for aesthetic considerations such as taste, color and odor in drinking water. These constituents do not pose a risk to human health.

State Revised Total Coliform Rule (RTCR): This Consumer Confidence Report (CCR) reflects changes in drinking water regulatory requirements during 2022. These revisions add the requirements of the federal Revised Total Coliform Rule, effective since April 1, 2016, to the existing state Total Coliform Rules. The revised rule maintains the purpose to protect public health by ensuring the integrity of the drinking water distribution system and monitoring for the presence of microbials (i.e., total coliform and E. coli bacteria). The U.S. EPA anticipates greater public health protection as the rule requires water systems that are vulnerable to microbial contamination to identify and fix problems. Water systems that exceed a specified frequency of total coliform occurrences are required to conduct an assessment to determine if any sanitary defects exist. If found, these must be corrected by the water system. The state Revised Total Coliform Rule became effective July 1, 2022. SMR did not have total coliform or E. coli in the monthly samples.

**Summary Information for Violation of a MCL, MRDL, AL, TT,
or Monitoring and Reporting Requirement & Compliance with Other Regulations**

The State requires the Refinery to test the water on a regular basis and last year the potable water met all U.S. EPA and State drinking water health standards. There were no violations of a primary or secondary drinking water standard (MCL, MRDL, AL, TT or Monitoring and Reporting requirement). In addition, there were no fecal indicator–positive results for Groundwater Source samples.