


PHILLIPS 66
SANTA MARIA REFINERY
2555 Willow Road
Arroyo Grande, CA 93420



PROVIDING ENERGY. IMPROVING LIVES.

June 27, 2022

ELECTRONIC TRANSMITTAL

Brian Whetsler
Environmental Health Specialist
Small Water Systems
Environmental Health Services
2156 Sierra Way, Suite B
San Luis Obispo, CA 93401

2021 Consumer Confidence Report
System Number 4000225

Dear Mr. Whetsler:

Attached are the 2021 Consumer Confidence Report and Consumer Confidence Report Certification Form. Phillips 66, Santa Maria Refinery has a non-transient non-community water system, system number 4000225.

Please contact me should you have questions concerning this submittal at (805) 343-3241.

Sincerely,



Kristen M. Kopp
Senior Environmental & PSM Consultant

KMK:bes

Attachment

e-cc: Ms. Leslie Terry
San Luis Obispo County Health Dept.
Division of Environmental Health
2156 Sierra Way, Suite B
San Luis Obispo, CA 93401

Ms. Carrie Zurr-Lopez
San Luis Obispo County Health Dept.
Division of Environmental Health
2156 Sierra Way, Suite B
San Luis Obispo, CA 93401

SLO County, EHS
ehs@co.slo.ca.us

e-bcc: D. Bowman – HSE
J. Kertis – Environmental
2022 ENV Reader File (Livelink)

Consumer Confidence Report Certification Form

(To be submitted with a copy of the CCR)

Water System Name: Phillips 66

Water System Number: 4000225

The water system named above hereby certifies that its Consumer Confidence Report was distributed on June 27, 2021 (date) to customers (and appropriate notices of availability have been given). Further, the system certifies that the information contained in the report is correct and consistent with the compliance monitoring data previously submitted to the State Water Resources Control Board, Division of Drinking Water (DDW).

Certified by: Name: Kristen M. Kopp
Signature: 
Title: Senior Environmental & PSM Consultant
Phone Number: (805) 343-3241 Date: June 27, 2021

To summarize report delivery used and good-faith efforts taken, please complete this page by checking all items that apply and fill-in where appropriate:

- ☐ CCR was distributed by mail or other direct delivery methods (attach description of other direct delivery methods used).
- ☒ CCR was distributed using electronic delivery methods described in the Guidance for Electronic Delivery of the Consumer Confidence Report (water systems utilizing electronic delivery methods must complete the second page).
- ☒ "Good faith" efforts were used to reach non-bill paying consumers. Those efforts included the following methods:
 - ☐ Posting the CCR at the following URL: www.
 - ☐ Mailing the CCR to postal patrons within the service area (attach zip codes used)
 - ☐ Advertising the availability of the CCR in news media (attach copy of press release)
 - ☐ Publication of the CCR in a local newspaper of general circulation (attach a copy of the published notice, including name of newspaper and date published)
 - ☒ Posted the CCR in public places (attach a list of locations)
 - ☐ Delivery of multiple copies of CCR to single-billed addresses serving several persons, such as apartments, businesses, and schools
 - ☐ Delivery to community organizations (attach a list of organizations)
 - ☐ Publication of the CCR in the electronic city newsletter or electronic community newsletter or listserv (attach a copy of the article or notice)
 - ☐ Electronic announcement of CCR availability via social media outlets (attach list of social media outlets utilized)
 - ☐ Other (attach a list of other methods used)
- ☐ For systems serving at least 100,000 persons: Posted CCR on a publicly accessible internet site at the following URL: www.
- ☐ For privately-owned utilities: Delivered the CCR to the California Public Utilities Commission

Consumer Confidence Report Electronic Delivery Certification

Water systems utilizing electronic distribution methods for CCR delivery must complete this page by checking all items that apply and fill-in where appropriate.

- ☐ Water system mailed a notification that the CCR is available and provides a direct URL to the CCR on a publicly available website where it can be viewed (attach a copy of the mailed CCR notification). URL: www. _____
- ☐ Water system emailed a notification that the CCR is available and provides a direct URL to the CCR on a publicly available site on the Internet where it can be viewed (attach a copy of the emailed CCR notification). URL: www. _____
- ☒ Water system emailed the CCR as an electronic file email attachment.
- ☐ Water system emailed the CCR text and tables inserted or embedded into the body of an email, not as an attachment (attach a copy of the emailed CCR).
- ☐ *Requires prior DDW review and approval.* Water system utilized other electronic delivery method that meets the direct delivery requirement.

Provide a brief description of the water system's electronic delivery procedures and include how the water system ensures delivery to customers unable to receive electronic delivery.

The report is emailed to all Santa Maria Refinery workers who have computer access at this Facility, which has a non-transient non-community water system. The CCR is also posted on bulletin boards around the Facility for those who may not have computer access.

This form is provided as a convenience and may be used to meet the certification requirement of section 64483(c) of the California Code of Regulations.

2021 Consumer Confidence Report

Water System Name: **Phillips 66**

Report Date: **June 27, 2022**

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 - December 31, 2021 and may include earlier monitoring data.

Este informe contiene información muy importante sobre su agua para beber. Tradúzcalo ó hable con alguien que lo entienda bien. Favor de comunicarse Phillips 66, Santa Maria Refinery a (805) 343-1776 para asistirlo en español.

Santa Maria Refinery's water met all primary and secondary drinking water standards. The tables below list all the constituents that were detected and show how they compare to the State and Federal standards. The Department of Environmental Health requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. As such, some of the data, though representative of the water quality, are more than one year old. All the results are from the most recent sampling event for each listed constituent.

The samples are collected at the source (well water) and at the potable water distribution points. The distribution water is a mixture of reverse osmosis (RO) water and well water. The potable water stream goes through UV filters and activated carbon filters to the distribution system. Tables 1 and 2 show results for samples collected at various distribution points. Tables 3, 4 and 5 show results for samples collected at the source water: well #2, well #4 and well #5. Although the report includes data from the water source in Tables 3, 4 and 5, the potable water that the consumer contacts is from the potable water distribution system.

Phillips 66 is committed to keeping you informed and providing this annual review of the water supply. Employees, visitors, and other water users may communicate concerns and other issues regarding the water system to Kristen Kopp at (805) 343-3241. Any issues regarding changes to the potable water system would involve the facility managers and supervisors and be discussed in facility operations meetings.

If you need copies of this report or have any questions concerning the potable water system, please contact Kristen Kopp at (805) 343-3241 or email at Kristen.M.Kopp@P66.com.

Type of water source(s) in use:

Well Water

Name & general location of source(s):

Well #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.

TERMS USED IN THIS REPORT

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 (USEPA).

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.

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.

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.

Regulatory Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

SMCL: Secondary Maximum Contaminant Level

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)

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.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (U.S. EPA) and the State Water Resources Control Board (State Water 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:

Tables 1, 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

Microbiological Contaminants (complete if bacteria are detected)	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, 2021, and June 30, 2021 (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 (complete if lead or copper detected in the last sample set)	Sample Date	No. of Samples Collected	90 th Percentile Level Detected	No. Sites Exceeding AL	AL	PHG	No. of Schools Requesting Lead Sampling	Typical Source of Contaminant
Lead (ppb)	2021	15	3.1	0	15	0.2	0	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	2021	15	0.090	0	1.3	0.3	Not applicable	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)	2017	82	64 - 100	none	none	Salt present in the water and is generally naturally occurring
Hardness (ppm)	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 <u>PRIMARY</u> 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)	2021	2.5	0.63 – 5.2	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits.
Aluminum (ppm)	2021 & 2020	0.047	<0.020 - 0.140	1	0.6	Erosion of natural deposits; residue from some surface water treatment processes
Fluoride (ppm)	2020	0.19	0.13-0.23	2.0	1	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories

TABLE 5 – DETECTION OF CONTAMINANTS WITH A <u>SECONDARY</u> 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 & 2020	47	<20-140	200	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)	2021 & 2017	183	<50 - 550	300	N/A	Leaching from natural deposits; industrial wastes
Turbidity (Units, NTU)	2021 & 2017	1.5	0.18 – 3.2	5	N/A	Soil runoff
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 Language
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).

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.

Lead-Specific Language: 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 (1-80000-426-4791) or at <http://www.epa.gov/lead>.

State Revised Total Coliform Rule (RTCR) – This Consumer Confidence Report (CCR) reflects changes in drinking water regulatory requirements during 2021. 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, 2021. 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.

Bulletin Board Posting

Please post the attached information on the bulletin board in the designated area.

Discard this list and post only the attachments

Santa Maria Refinery	Requested to Post	Alternate
Administration (Bldg. 2)	Marcie Lou	Susan Wingert
Firehouse (Bldg. 41)	Donald Bowman	Designee
Coker Common (Bldg. 85)	Jesse Ruiz	Designee
Coker Control Center (Bldg. 44)	Mark Steigler	Designee
Sulfur/Utility Control (Bldg. 50)	Jesse Ruiz	Designee
Maintenance Hallway (Bldg. 12)	Vince Romero	Designee
Maintenance Lunchroom (Bldg. 12)	Jim Anderson	Designee
I & E Shop (Bldg. 14)	Bob Wynn	Designee
Brinderson (Bldg. 24)	Angel Lopez	Designee
ENV Bungalow (Bldg. 7)	James Kertis	Barbara Strasbaugh
H&S Bungalow (Bldg. 5)	Augie Rincon	Designee
Refinery Laboratory (Bldg. 4)	Michelle Moore	Designee

Carbon Plant	Requested to Post	Alternate
Administration Building (Bldg. 68)	Debbie O'Grady	Designee
Change Room (Bldg. 67)	Debbie O'Grady	Designee

Remove the previous year's posting.

Strasbaugh, Barbara E (San Luis Personnel Services)

From: Microsoft Outlook
To: ehs@co.slo.ca.us; Brian Whetsler (bwhetsler@co.slo.ca.us); Leslie Terry; Carrie Zuur-Lopez
Sent: Monday, June 27, 2022 12:22 PM
Subject: Relayed: Phillips 66 Santa Maria Refinery 2021 Consumer Confidence Report

Delivery to these recipients or groups is complete, but no delivery notification was sent by the destination server:

ehs@co.slo.ca.us (ehs@co.slo.ca.us)

[Brian Whetsler \(bwhetsler@co.slo.ca.us\)](mailto:Brian.Whetsler@co.slo.ca.us) (bwhetsler@co.slo.ca.us)

[Leslie Terry \(lterry@co.slo.ca.us\)](mailto:Leslie.Terry@co.slo.ca.us)

[Carrie Zuur-Lopez \(czuurlopez@co.slo.ca.us\)](mailto:Carrie.Zuur-Lopez@co.slo.ca.us)

Subject: Phillips 66 Santa Maria Refinery 2021 Consumer Confidence Report