2021 Consumer Confidence Report

Water System Information

Water System Name: Lemoore Naval Air Station

Report Date: June 30, 2022

Type of Water Source(s) in Use: Surface Water (SW) and Ground Water (GW)

Name and General Location of Source(s): California Aqueduct delivered through Westland's Water District (WWD) and Lemoore Naval Airstation Admin well No. 7

Drinking Water Source Assessment Information: NASL performed a watershed sanitary survey (WSS) of their water supply laterals in 2018 and 2019. The findings of the 2018-2019 WSS update are that no structural changes have occurred to supply laterals since the 2012 WSS update report. NASL remains engaged in on-going dialogues with Westland Water District and DDW to reduce and prevent hazards in the watershed.

Time and Place of Regularly Scheduled Board Meetings for Public Participation: N/A

For More Information, Contact: Installation Environmental Program Director: 559-998-4078.

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, 2021 and may include earlier monitoring data.

Importance of This Report Statement in Five Non-English Languages (Spanish, Mandarin, Tagalog, Vietnamese, and Hmong)

Language in Spanish: Este informe contiene información muy importante sobre su agua para beber. Favor de comunicarse Lemoore Naval Air Station a 559-998-4078 para asistirlo en español.

Language in Mandarin: 这份报告含有关于您的饮用水的重要讯息。Lemoore Naval Air Station以获得中文的帮助: 559-998-4078.

Language in Tagalog: Ang pag-uulat na ito ay naglalaman ng mahalagang impormasyon tungkol sa inyong inuming tubig. Mangyaring makipag-ugnayan sa Lemoore Naval Air Station o tumawag sa 559-998-4078 para matulungan sa wikang Tagalog.

Language in Vietnamese: Báo cáo này chứa thông tin quan trọng về nước uống của bạn. Xin vui lòng liên hệ Lemoore Naval Air Station tại 559-998-4078 để được hỗ trợ giúp bằng tiếng Việt.

Language in Hmong: Tsab ntawv no muaj cov ntsiab lus tseem ceeb txog koj cov dej haus. Thov hu rau Lemoore Naval Air Station weathntawm 559-998-4078 rau kev pab hauv lus Askiv.

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, 2, 3, 4, 5, 6, 7, 8, and 10 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
E. coli	(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 1.A. 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 month) 0	0	1 positive monthly sample (a)	0	Naturally present in the environment
Fecal Coliform and <i>E. coli</i>	(in the year)	0	0	None	Human and animal fecal waste

⁽a) For systems collecting fewer than 40 samples per month: two or more positively monthly samples is a violation of the total coliform MCL Lemoore Naval Air Station

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

Complete if lead or copper is detected in the last sample set.

Lead and Copper	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)	SEP 20'	37	0	1	15	0.2	0	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	SEP 20'	37	.429	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)	4/6/2021	65	65	None	None	Salt present in the water and is generally naturally occurring
Hardness (ppm)	4/6/2021	120	120	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
Chlorine (mg/L)	2021	2.1 Average	1.5-2.6	[MRDL = 4.0 (as Cl2)]	[MRDLG = 4 (as Cl2)]	Drinking water disinfectant added for treatment
Aluminum (mg/L)	4/6/2021	21	12*-21	1000	.6	Erosion of natural deposits; residue from some surface water treatment processes
Arsenic (μg/L)	2021 Quarterly	7.3	0-7.3	10	.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Fluoride (mg/L)	4/6/2021	.24	024	2	1	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (mg/L)	4/6/2021	.41	041	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
TTHMs [Total Trihalomethanes] (µg/L)	2021 Quarterly	56.8 Average	20-63	80	N/A	Byproduct of drinking water disinfection

HAA5 [Sum of 5	2021	20	5.5-23	60	N/A	Byproduct of
Haloacetic Acids]	Quarterly	Average				drinking water
(µg/L)						disinfection

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 (μg/L)	4/6/2021	.021	.012021	200	-	Erosion of natural deposits; residual from some surface water treatment processes
Chloride (mg/L)	4/6/2021	110	100-110	500	-	Runoff/leaching from natural deposits; seawater influence
Color (Units)	4/6/2021	15	10-15	15	-	Naturally-occurring organic materials
Iron (µg/L)	4/6/2021	130	0-130	300	-	Leaching from natural deposits; industrial wastes
Manganese (μg/L)	4/6/2021	14	5.3-14	50	-	Leaching from natural deposits
Specific Conductivity (mg/L)	4/6/2021	1600	590-1600	1600	-	Substances that form ions when in water; seawater influence
Sulfate (mg/L)	4/6/2021	510	47-510	500	-	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (mg/L)	4/6/2021	1000	320-1000	1000	-	Runoff/leaching from natural deposits
Turbidity (Units)	4/6/2021	.51	.3151	5	-	Soil runoff

Table 6. Detection of Unregulated Contaminants

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	Notification Level	Health Effects
Vanadium (ppb)	Quarterly	Treated	Treated	N/A	Vanadium exposures
-Treated	2013-2014	2.5	2.0 - 2.8		resulted in
-Distribution		Distribution	Distribution		developmental and reproductive effects in
		3.0	2.2 - 4.7		rats.
Molybdenum (ppb)	Quarterly	Treated	Treated	N/A	N/A
-Treated	2013-2014	6.9	1.6 - 18		
-Distribution		Distribution	Distribution		
		6.0	1.0 – 18		
Strontium (ppb)	Quarterly	Treated	Treated	N/A	N/A
- Treated	2013-2014	272.5	200 - 340		

- Distribution		Distribution	Distribution		
		272.5	190 – 360		
Chromium (total) (ppb) -Treated -Distribution	Quarterly 2013-2014	Treated 0.3 Distribution 0.4	Treated 0.20 - 0.36 Distribution 0.31 - 0.48	N/A	N/A
Chromium-6 (ppb) -Treated -Distribution	Quarterly 2013-2014	Treated 0.2 Distribution 0.3	Treated 0.14 - 0.30 Distribution 0.24 - 0.40	N/A	N/A
Chlorate -Treated -Distribution	Quarterly 2013-2014	Treated 0.2 Distribution 0.3	Treated 99 - 650 Distribution 510 - 1100	N/A	Animal studies demonstrated that chlorate exposure in rats caused adverse effects to the pituitary and thyroid glands.
Manganese (μg/L)	Quarterly 2019-2020	1.94 Average	.42-2.5	N/A	Manganese exposures resulted in neurological effects. High levels of manganese in people have been shown to result in adverse effects to the nervous system.
Dichloroacetic Acid (μg/L)	Quarterly 2019-2020	1.59 Average	0.7-4.9	N/A	N/A
Trichloroacetic Acid (μg/L)	Quarterly 2019-2020	0.53 Average	0.0-2.3	N/A	N/A
Monobromoacetic Acid (µg/L)	Quarterly 2019-2020	0.64 Average	0.0-1.3	N/A	N/A
Dibromoacetic Acid (μg/L)	Quarterly 2019-2020	3.93 Average	1.9-7.1	N/A	N/A
Bromochloroacetic Acid (µg/L)	Quarterly 2019-2020	3.58 Average	1.9-6.7	N/A	N/A
Bromodichloroacedic Acid (µg/L)	Quarterly 2019-2020	2.08 Average	1.3-3.3	N/A	N/A
Chlorodibromoacetic Acid (µg/L)	Quarterly 2019-2020	2.84 Average	1.7-4.5	N/A	N/A
Tribromoacetic Acid (μg/L)	Quarterly 2019-2020	1.55 Average	0.0-3.6	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).

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. NASL 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. [Optional: If you do so, you may wish to collect the flushed water and reuse it for another beneficial purpose, such as watering plants.] 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.

Summary Information for Violation of a MCL, MRDL, AL, TT, or Monitoring and Reporting Requirement

Table 7. Violation of a MCL, MRDL, AL, TT or Monitoring Reporting Requirement

Violation	Explanation	Duration	Actions Taken to Correct Violation	Health Effects Language
Monitor Reporting Requirement	Failed to report Turbidity data for June 21, 2021 due to data recorder failure.	45 minutes	NASL is in process of upgrading SCADA system.	N/A

For Water Systems Providing Groundwater as a Source of Drinking Water

Table 8. Sampling Results Showing Fecal Indicator-Positive Groundwater Source Samples

Microbiological Contaminants (complete if fecal- indicator detected)	Total No. of Detections	Sample Dates	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
E. coli	(In the year) 0		0	(0)	Human and animal fecal waste
Enterococci	(In the year) 0		TT	N/A	Human and animal fecal waste
Coliphage	(In the year)		TT	N/A	Human and animal fecal waste

For Systems Providing Surface Water as a Source of Drinking Water

Table 10. Sampling Results Showing Treatment of Surface Water Sources

Treatment Technique (a) (Type of approved filtration technology used)	Conventional Treatment
Turbidity Performance Standards (b) (that must be met through the water treatment process)	Turbidity of the filtered water must:
	1 – Be less than or equal to 0.3 NTU in 95% of measurements in a month.
	2 – Not exceed 0.5 NTU for more than eight consecutive hours.
	3 – Not exceed 1.0 NTU at any time.
Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1.	100%
Highest single turbidity measurement during the year	0.300 NTU, Instantaneous and less than eight consecutive hours.
Number of violations of any surface water treatment requirements	0

⁽a) A required process intended to reduce the level of a contaminant in drinking water.

⁽b) Turbidity (measured in NTU) is a measurement of the cloudiness of water and is a good indicator of water quality and filtration performance. Turbidity results which meet performance standards are considered to be in compliance with filtration requirements.