

2022 Consumer Confidence Report

Water System Information

Water System Name: Lemoore Naval Air Station

Report Date: June 30, 2023

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 Air Station Admin Well No. 7

Drinking Water Source Assessment Information: NASL last performed a watershed sanitary survey (WSS) of their water supply laterals in 2018 and 2019. Findings from the 2018-2019 WSS revealed no structural changes had occurred to supply laterals serving NASL since the 2012 WSS update report. NASL remains committed to engaged in on-going dialogue with the Westland Water District and DDW to reduce and prevent hazards that may be associated with 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

The installation's drinking water quality is tested for many constituents as required by State and Federal regulations. This report summarizes the monitoring test results for NASL during the period from January 1 to December 31, 2022 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) or SMCL	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.
Variations 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 either surface terrain or subsurface channels, it dissolves naturally-occurring minerals that may include radioactive material while at the same time being exposed to other substances associated with animal or human activity.

Contaminants that may be present in source water include:

- Microbial contaminants such as viruses and bacteria can be attributed to sewage treatment plants operations, septic systems, the agricultural livestock industry, or wildlife in general.
- Inorganic contaminants such as salts and metals can be naturally-occurring or result from urban storm-water runoff from industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides may come from a variety of sources such as agriculture, urban storm-water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals can result as byproducts of industrial processes and petroleum production, and can also come from gas vehicle stations, urban storm-water runoff, agricultural application, and septic systems.
- Radioactive contaminants 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 Water Resources Control Board prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. 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, and 8 list all of the drinking water contaminants that were detected during the most recent sampling period 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 listed data, though representative of the water quality, was collected over one year. 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 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	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

For violation of the total coliform MCL, include potential adverse health effects, and actions taken by water system to address the violation: [Enter information]

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. of 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 (ppb)	SEP 20'	37	.429	0	1,300	300	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)	4/5/2022	240	51 - 240	None	None	Salt present in the water and is generally naturally occurring....
Hardness (ppm)	4/5/2022	160	120 – 160	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 (MCL G) [MRD LG]	Typical Source of Contaminant
Chlorine (mg/L)	2022	1.56 Average	1.54 – 1.58	[MRDL = 4.0 (as Cl ₂)]	[MRD LG = 4 (as Cl ₂)]	Drinking water disinfectant added for treatment.
Arsenic (µg/L)	2022 Quarterly	9.0	0 – 9.0	10	.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes.
Fluoride (mg/L)	4/5/2022	0.25	0 - 0.25	2	1	Erosion of natural deposits; water

						additive that promotes strong teeth; discharge from fertilizer and aluminum factories.
Nitrate (mg/L)	4/5/2022	0.68	0 - 0.68	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits.
TTHMs [Total Trihalomethanes] (µg/L)	2022 Quarterly	30.5 Average	23.0 – 46.8	80	N/A	Byproduct of drinking water disinfection
HAA5 [Sum of 5 Haloacetic Acids] (µg/L)	2022 Quarterly	8.6 Average	6.0 – 13.8	60	N/A	Byproduct of drinking water 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)	4/5/2022	24	23- 24	1000	-	Erosion of natural deposits; residual from some surface water treatment processes.
Chloride (mg/L)	4/5/2022	86	68 - 86	500	-	Runoff/leaching from natural deposits; seawater influence.
Color (Units)	4/5/2022	20	5 - 20	15	-	Naturally-occurring organic materials.
Iron (µg/L)	4/5/2022	99	0 - 99	300	-	Leaching from natural deposits; industrial wastes.
Manganese (µg/L)	4/5/2022	160	24 - 160	50	-	Leaching from natural deposits.
Specific Conductivity (mg/L)	4/5/2022	1400	510 - 1400	1600	-	Substances that form ions when in water; seawater influence.

Sulfate (mg/L)	4/5/2022	420	48 - 420	500	-	Runoff/leaching from natural deposits; industrial wastes.
Total Dissolved Solids (mg/L)	4/5/2022	1000	280 - 910	1000	-	Runoff/leaching from natural deposits.
Turbidity (Units)	4/5/2022	0.56	0.21 - 0.56	5.0	-	Soil runoff.

Table 6. Detection of Unregulated Contaminants

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detection s	Notification Level	Health Effects
Vanadium (ppb) -Treated -Distribution	Qtrly 2013 & 2014	Treated 2.5 Distribution 3.0	Treated 2.0 - 2.8 Distribution 2.2 - 4.7	N/A	Vanadium exposures resulted in developmental and reproductive effects in rats.
Molybdenum (ppb) -Treated -Distribution	Qtrly 2013 & 2014	Treated 6.9 Distribution 6.0	Treated 1.6 - 18 Distribution 1.0 – 18	N/A	N/A
Strontium (ppb) - Treated - Distribution	Qtrly 2013 & 2014	Treated 272.5 Distribution 272.5	Treated 200 - 340 Distribution 190 – 360	N/A	N/A
Chromium (total) (ppb) -Treated -Distribution	Qtrly 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	Qtrly 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	Qtrly 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 (ppb)	Quarterly 2019-2020	1.94 Average	0.42 - 2.5	20 ppb	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
Bromodichloroacetic 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 domestic plumbing. NAS – Lemoore 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. Please note that flushed water can be collected for other beneficial uses 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>.

Additional Special Language for Arsenic: While your drinking water meets the federal and state standard for arsenic, it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. The U.S. Environmental Protection Agency continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

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
June 23, 2022	Turbidity monitoring data was temporary lost for 15-minute interval readings on all filters as well as the combined filter effluent. This resulted from a change over from an old monitoring system to a new monitoring system.	24 hours.	The data was able to be recovered from the new monitoring system.	Although data collection was temporarily out of service, the water treatment plant operation did not observe any conditions that would indicate turbidity spikes were occurring during the event.
August 2, 2022	Ground water well #7 was out of service due to an electrical problem and therefore did not undergo routine monthly sampling.	Repair was completed during the first week of September 2022 and sampled accordingly.	Electrical repair work was performed on the water well system.	Although permitted and monitored monthly, water well #7 is not actively used for water supply use.
August 30, 2022	Turbidity monitoring for approximately 30 minutes was not performed by the water treatment plant's monitoring system due to a security system program update.	30 minutes.	Turbidity monitoring returned after the computer update.	Alarms associated with the system were still in active service although measurement reading were unavailable during the date monitoring down time.

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
<i>E. coli</i>	(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) 0		TT	N/A	Human and animal fecal waste

Summary Information for Fecal Indicator-Positive Groundwater Source Samples, Uncorrected Significant Deficiencies, or Violation of a Groundwater TT

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	August 17, 2022: NTU: 0.276 instantaneous four no more than 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.