To: Site 2 Palmdale Employees and Visitors

From: Lockheed Martin Aeronautics Palmdale Environment, Safety and Health

Subject: 2020 ANNUAL DRINKING WATER QUALITY CONSUMER CONFIDENCE REPORT

The California Department of Public Health (CDPH) requires Lockheed Martin to prepare an annual drinking water Consumer Confidence Report (CCR) for water supplied from the Site 2 groundwater well and associated distribution system. This CCR is attached for your reference and summarizes the results of chemical constituents that were detected during our most recent water quality testing. The Site 2 groundwater well and distribution system water supply complies with all federal and state regulations.

For more information on drinking water quality, please contact Environment, Safety & Health at Ext. 1348 or 4300.

2020 Consumer Confidence Report

Water System Name:	Lockheed Martin Aeronautics Company,	Report Date:	06/16/2021	
	Palmdale, CA (System No. 1910238)			

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, 2020 and may include earlier monitoring data.

Type of water source(s) in use: Site 2 Groundwater Well (No.2)						
Name & general location of source(s): 20 th Street East and Avenue M, Palmdale, CA						
Drinking Water Source Assessment information:	A source water assessment was conducted of the Lockheed Martin's Aeronautics Company groundwater well #2 (Site 2) in November 2001. The source is considered most vulnerable to contaminants associated with aircraft maintenance and fueling activities. A complete assessment can be requested by calling Steven Chov at (661)572-1348 or Regional Water Quality Control Board – Division of Drinking Water District at (818)551-0224.					
For more information, contact: Steven Chov	Phone: (661)572-1348					

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 (U.S. EPA).

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.

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.

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 *E. coli* MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

ND: not detectable at testing limit

ppm: parts per million or milligrams per liter (mg/L)

ppb: parts per billion or micrograms per liter (μ g/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. 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.

Tables 1, 2, 3, 4, 5, 6, and 7 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 –	SAMPLIN	G RES	ULTS SHOW	ING THE DE	TECTIO	ON OF	COLIFORM B	ACTERIA
Microbiological Contaminants (complete if bacteria detected)	Highest N Detectio		o. of Months in Violation	Ν	1CL		MCLG	Typical Source of Bacteria
Total Coliform Bacteria (state Total Coliform Rule)	0 (sampl quarterl		0	1 positive month	nly sample	e ^(a)	0	Naturally present in the environment
Fecal Coliform or <i>E. coli</i> (state Total Coliform Rule)	0 (in 2020)		0	A routine sample and a repeat sample are total coliform positive, and one of these is also fecal coliform or <i>E. coli</i> positive		0	Human and animal fecal waste	
<i>E. coli</i> (federal Revised Total Coliform Rule)	0 (in 202	0)	0	(b)		0	Human and animal fecal waste	
(b) Routine and repeat samples ar or system fails to analyze total co	 (a) Two or more positive monthly samples is a violation of the MCL (b) Routine and repeat samples are total coliform-positive and either is <i>E. coli</i>-positive or system fails to take repeat samples following <i>E. coli</i>-positive routine sample or system fails to analyze total coliform-positive repeat sample for <i>E. coli</i>. 							
TABLE 2	– SAMPL	ING RE	SULTS SHO	WING THE D	DETECT	ION OI	F LEAD AND (COPPER
Lead and Copper (complete if lead or copper detected in the last sample set)	Sample Date	No. of Sample Collect	es Percentil	Exceeding	AL	PHG	No. of Schools Requesting Lead Sampling	Typical Source of Contaminant
Lead (ppb)	8/25/18	9	13	1	15	0.2	Not applicable	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	8/25/18	9	0.1	0	1.3	0.3	Not applicable	Internal corrosion of household plumbing systems; erosion of natural

					ts; leaching from
				wood	preservatives

	TABLE 3	– SAMPLING F	RESULTS FOR	SODIUM A	AND HARDI	NESS
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	6/28/11	24	N/A	None	None	Salt present in the water and is generally naturally occurring
Hardness (ppm)	6/28/11	69	N/A	None	None	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring
TABLE 4 – DET	TECTION C	OF CONTAMIN	ANTS 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
Fluoride (ppm)	6/17/20	0.14	N/A	2.0	1	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Hexavalent Chromium	6/17/20	0.0052	N/A	NA	NA	Regulation was removed in Sept.2017; therefore there are no current standards.
Cadmium (ppb)	6/17/20	0.0017	NA	5	0.04	Internal corrosion of galvanized pipes; erosion of natural deposits; discharge from electroplating and industrial chemical factories, and metal refineries, runoff from waste batteries and paints.
Nitrate (as nitrogen, N) (ppm)	6/17/20	0.54	N/A	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
TTHMs (total trihalomethanes) (ppb)	6/17/20	5.3	3.8-6.8	80	N/A	Byproduct of drinking water disinfection
Turbidity (NTU)	Quarterly 2020	0.23	0.14-0.42	TT	N/A	Soil runoff
TABLE 5 – DETE	ECTION OF	CONTAMINAN	NTS WITH A <u>S</u>	ECONDAR	<u>Y</u> DRINKIN	IG WATER STANDARD
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	SMCL	PHG (MCLG)	Typical Source of Contaminant
Chloride (ppm)	6/28/11	5.5	N/A	500	с	Runoff/leaching from natural deposits; seawater influence
Specific Conductance (umhos/cm)	8/25/18	250	N\A	1,600	с	Substances that form ions when in water; seawater influence
Total Dissolved Solids (TDS) (ppm)	6/28/11	150	N/A	1,000	c	Runoff/leaching from natural deposits
Turbidity (NTU)	Quarterly 2020	0.23	0.14042	5	с	Soil runoff
(c) There are no PHG's, MCL of aesthetics.	.Gs, or manda	tory standard health	effects language f	or these const	tituents because	e secondary MCLs are set on the basis
	TABLE	6 – DETECTION	N OF UNREGU	LATED CO	NTAMIN A	NTS
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	Notifica	tion Level	Health Effects Language
Total Vanadium (ppb)	6/28/11	17	N/A		50	Vanadium exposures resulted in developmental and reproductive effects in rats.

TABLE 7 – VIOLATION OF MONITORING REPORT REQUIREMENT									
Violation	Explanation	Duration	Actions Taken to Correct Violation	Health Effects Language					
Stage 2 Disinfection	Lockheed Martin did	3 years	Lockheed Martin currently	Some people who drink water					
Byproduct Monitoring for	not collect annual	-	collecting annual samples for	containing trihalomethanes in excess of					
2016, 2017, and 2019 for	TTHM samples for		TTHM and in compliance as of	the MCL over many years may					
TTHM	2016, 2017, and 2019		2020.	experience liver, kidney, or central					
				nervous system problems, and may have					
				an increased risk of getting cancer.					
Stage 2 Disinfection	Lockheed Martin did	3 years	Lockheed Martin currently	Some people who drink water					
Byproduct Monitoring for	not collect annual	-	collecting annual samples for	containing Haloacetic acids in excess of					
2016, 2017, and 2019 for	HAA5 samples for		HAA5 and in compliance as of	the MCL over many years may have an					
HAA5	2016, 2017, and 2019		2020.	increased risk of getting cancer.					

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During the 2016, 2017, and 2019, we did not monitor for total trihalomethanes and haloacetic acids from the distribution system and therefore, cannot be sure of the quality of your drinking water during that time.

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. Lockheed Martin 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.

APPENDIX F: Certification Form

Consumer Confidence Report

Certification Form

(to be submitted with a copy of the CCR)

Water System Name:	Lockheed Martin Aeronautics Company
Water System Number:	1910238

The water system named above hereby certifies that its Consumer Confidence Report was distributed on ______ (*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.

Certified by:	Name:	Suzanne Q. Johnson				
	Signature:	Sugarne Q. Sk	nso-			
	Title:	ESH Sr. Manager				
	Phone Number:	(661)572-2579	Date:			

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

CCR was distributed by mail or other direct delivery methods. Specify other direct delivery methods used:

Good faith" efforts were used to reach non-bill paying consumers. Those efforts included the following methods:

- Posting the CCR on the Intranet at Lockheed Martin
- 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)
- 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 address: www.______
- For investor-owned utilities: Delivered the CCR to the California Public Utilities Commission

This form is provided as a convenience for use to meet the certification requirement of the California Code of Regulations, section 64483(c).

2020 Consumer Confidence Report (CCR) List of locations the CCR is posted:

Site 2:

- Building 221, Guard Shack bulletin board Break room
- Building 210, Drinking Water Fountain between Men's and Women's Restroom
- Building 210, Cafeteria bulletin board Closest to conference room
- Building 210, Hanger bulletin board Columns E8 & E9 (U2 Tool Crib)
- Building 211, Paint Shop Outside Mix Room
- Building 250, Maintenance Area bulletin board Outside Office
- Building 232, AGE Shop Above copier outside office