2015 Consumer Confidence Report

Water System Name: <u>Naval Air Facility (NAF) El Centro</u> Report Date: <u>June 2016</u>

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, 2015.

Este reporte contiene informacion importante sobre su agua potable. Traduzcalo o hable con alguien que lo entienda bien.

Type of water source(s) in use: Colorado River Surface Water

Name and location of source(s): <u>The Imperial Irrigation District (I.I.D.) supplies NAF El Centro with</u> raw water via the All American Canal and Central Main Canal, through the Elder Canal near NAF El Centro Gate 104B.

Drinking Water Source Assessment information: <u>NAF El Centro inspects regularly the source water</u> to ensure that raw water coming into the treatment plant continues to be safe. The I.I.D. conducted a Watershed Sanitary Survey in 2014. A copy of this survey may be obtained by contacting the State Water Resources Control Board-Division of Drinking Water, 1350 Front Street, Room 2050, San Diego, CA 92101 at (619) 522-4922.

Time and place of regularly scheduled board meetings for public participation: For additional information about your water or any scheduled meetings for public participation contact Mr. Bill Kagele, Water Program Manager, at (760) 339-2532.

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 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.

TERMS USED IN THIS REPORT (Continued):

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 Exceptions: Department permission to exceed an MCL or not comply with a treatment technique under certain conditions.

Running Annual Average (RAA)/Locational Running Annual Average (LRAA): is the average of sample results taken at a particular monitoring location during the previous four calendar quarters.

MFL: million fibers per liter

ND: not detectable at testing limit.

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

ppb: parts per billion or micrograms per liter (ug/L).

ppt: parts per trillion or nanograms per liter (ng/L).

ppq: parts per quadrillion or picograms 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 storm water 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 storm water runoff, and residual 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 storm water 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 USEPA and the <u>State Water Resources Control</u> <u>Board (State Board)</u> prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. <u>State Board</u> regulations also establish limits for contaminants in bottled water that must provide the same protection for public health. Tables 1, 2, 3, 4, 4A, 5, 5A, 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 necessary indicate that the water poses a health risk. The Department 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.

TABLE 1 – SAM	TABLE 1 – SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA								
Microbiological Contaminants	Highest Number of Detections	No. of months in violation	MCL	MCLG	Typical Sources of Bacteria				
Total Coliform Bacteria	0	0	No more than 1 positive monthly sample	0	Naturally present in the environment				
Fecal Coliform or E. Coli	0	0	A routine sample and a repeat sample are total coliform positive, and one of these is also fecal coliform or E. <i>coli</i> positive	0	Human and animal fecal waste				

TABLE 2 – SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER									
Lead and Copper	No. of samples collected August 2014	90 th percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant			
Lead (ppb)	10	ND	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits			
Copper (ppm)	10	ND	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	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant		
Sodium (ppm)	2015	130	110-130	none	none	Salt present in the water and is generally naturally occurring		
Hardness (ppm)	2015	350	330-350	none	none	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring		

TABLE 4	TABLE 4 – DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD								
Chemical or ConstituentSampleLevelRange of DetectedMCLPHG (MCLG)Typical Source of ContaminantConstituentDateDetectedDetections(MRDL)(MRDLG)									
Uranium (pCi/L)	2013	2.9	2.9	20	0.43	Erosion of natural deposits			
						Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories			
Fluoride (ppm)	2015	0.4	0.3-0.4	2.0	1				

TABLE 4A – STAGE 2 MONITORING TRIHALOMETHANES/HALOACETIC ACIDS (TTHM/HAA5)									
TTHM (ppb)	ppb)1st Quarter2nd Quarter3rd Quarter4th QuarterMCL (MRDL)Major Sources in Drinking Water								
TTHM Building 504 (Site 3)	47	36	63	60	80.0				
Site 3 LRAA	*40	*37	*48	52	80.0	By-Product of drinking			
HAA5 Building 504 (Site 3)	9.5	7.3	12	15	60.0	water disinfection			
Site 3 LRAA	*9	*9	*10	11	60.0				

*LRAA for quarters 1-3 are based on results from previous quarters not reported on this table.

TABLE 5 – DETECTION OF CONTAMINANTS WITH SECONDARY DRINKING WATER STANDARD								
Chemical orSampleLevelRange ofMCLPHGTypicalConstituentDateDetectedDetections(MRDL)(MRDLG)Contar								
Chloride (ppm)	2015	130	110-130	500	N/A	Runoff/leaching from natural deposits; seawater influence		
Sulfate (ppm)	2015	320	280-320	500	N/A	Runoff/leaching from natural deposits; industrial wastes		
Total Dissolved Solids (ppm)	2015	870	740-870	1000	N/A	Runoff/leaching from natural deposits		
Specific Conductance (uS/cm)	2015	1300	1200-1300	1600	N/A	Substances that form ions when in water; seawater influence		

TABLE 5.	TABLE 5A - DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATERSTANDARD									
Chemical or Constituent	Sample Dates	Ave. Level Detected	Range of Detections	Sample Date	Ave. Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant	
Constituent		Raw Water	r		Treated Wat	ter				
Aluminum (ppb)	2015	190	190	12 monthly samples in 2015	128	88-220	1000	None	Erosion of natural deposits; residue from some surface water treatment processes	
Iron (ppb)	2015	180	180	12 monthly samples in 2015	<100	<100	300	None	Leaching from natural deposits; industrial wastes	

TABLE 6 –SAMPLING RESULTS SHOWING TREATMENT LEVELS OF SURFACE WATER SOURCES

SUURCES							
Treatment Technique ^(a)							
(Type of approved filtration technology used)	Dual-Media						
Turbidity Performance Standards ^(b) (that must be met through the water treatment process)	 <u>Turbidity of the filtered water must</u>: 1 – Be less than or equal to 0.2 NTU in 95% of measurements in a month. 2 – Not exceed 1.0 NTU for more than eight consecutive hours while the plant is in operation. 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	0.13						
Number of violations of any surface water treatment							
requirements	None						

(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.

TABLE 7 – DETECTION OF CONTAMINANTS WITH NO MAXIMUM CONTAMINANT LEVELS									
Chemical or Constituent Sample Date Level Detected Notification Level									
Boron (ppm)	2012	0.19	1.0						
Vanadium (ppb)	2012	ND	50						
Chromium VI (ppb)	2015	<1.0	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 USEPA'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. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to decrease 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. The Naval Air Facility El Centro 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 thirty seconds to two 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 to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.



Water Conservation Strategies

- **Install low-flow showerheads or flow restrictors.** Switching to a high-performance showerhead with an output of no more than 2.5 gallons per minute can reduce water use by up to 75 percent.
- Shut off the tap while brushing teeth. After you wet your brush, turn off the water and rinse briefly, you will need only one half gallon of water. A running tap uses up to 10 gallons. Use the wet and rinse method for washing hands and face, or shaving.
- **Prevent and repair leaks.** Leaky faucets can waste hundreds of gallons of water overnight. Please notify Lincoln Housing of water leaks. Repair the leak with a new washer and prevent leaks by checking all faucet washers at least once per year.
- Always wash full loads. Your washing machine uses about 60 gallons per cycle. Most automatic dishwashers use 16 gallons per cycle. When shopping for a new machine, look for one with water and energy saving features.
- Keep a jug of cold water in the refrigerator instead of letting the tap run until cool.
- Check your toilet for leaks by placing a few drops of food coloring in the tank. If it shows up in the bowl, replace the flapper.
- When washing the car, use soap and water from a bucket. Use a hose with a shut-off nozzle for the final rinse.
- Adjust the sprinklers so only the water is watered, not the sidewalk or street.
- When mowing the lawn, raise the blade to a higher level. Close cut grass makes the roots work harder, requiring more water.
- When adding or replacing a plant, consider a drought tolerant species.
- Add mulch on planting beds to reduce evaporation.
- Monitor lawn for moisture stress. Tip: Walk across the lawn, if footprints appear, it is time to water.
- Adjust irrigation controllers for seasonal changes. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.
- Teach your kids about water conservation to ensure a future generation that uses water wisely.
- Visit <u>www.epa.gov/watersense</u> for more information.