

2010 Consumer Confidence Report

Water System Name: Naval Air Facility (NAF) El Centro **Report Date:** July 2011

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, 2010.

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): The Imperial Irrigation District (I.I.D.) supplies NAF El Centro with 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: NAF El Centro inspects regularly the source water to ensure that raw water coming into the treatment plant continues to be safe. A copy of this source water assessment may be viewed at: Office of Drinking Water, 1350 Front Street, Room 2050, San Diego, CA 92101. You may request a summary of the assessment be sent to you by contacting the California Department of Public Health at (619) 525-4922.

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 level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLGs are set by the U. S. Environmental Protection Agency.

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.

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

Running Annual Average: is the arithmetic average of results calculated at the end of every quarter for the previous consecutive four-quarter period.

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).

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 California Department of Drinking Water prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department 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 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 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 – 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 | More than 1 sample in a month with a detection | 0 | Naturally present in the environment |
| Fecal Coliform or E. Coli | 0 | 0 | A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or E. Coli | 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 2008 | 90 th percentile level detected | No. sites exceeding AL | AL | PHG | Typical Source of Contaminant |
|-----------------|--------------------------------------|--|------------------------|-----|------|---|
| Lead (ppb) | 15 | ND | 0 | 15 | 2 | Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits |
| Copper (ppm) | 15 | ND | 0 | 1.3 | 0.17 | 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) | 2010 | 130 | 110-130 | none | none | Generally found in ground and surface water |
| Hardness (ppm) | 2010 | 310 | 290-310 | none | none | Generally found in ground and surface water |

TABLE 4 – DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD

| Chemical or Constituent | Sample Date | Level Detected | Range of Detections | MCL (MRDL) | PHG (MCLG) (MRDLG) | Typical Source of Contaminant |
|-------------------------|-------------|----------------|---------------------|------------|--------------------|--|
| Aluminum (ppb) | 2010 | 440 | ND-440 | 1 | 600 | Erosion of natural deposits; residue from some surface water treatment processes |

| TABLE 4 (Continued) – DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD | | | | | | |
|---|--------------------|-----------------------|----------------------------|-------------------|---------------------------|---|
| Chemical or Constituent | Sample Date | Level Detected | Range of Detections | MCL (MRDL) | PHG (MCLG) (MRDLG) | Typical Source of Contaminant |
| Arsenic (ppb) | 2010 | 4.4 | ND-4.4 | 10 | 0.004 | Erosion of natural deposits; runoff from orchards; glass and electronics production wastes |
| Fluoride (ppm) | 2010 | 0.4* | 0.3-0.4 | 2.0 | 1 | Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories |
| Total Organic Carbon (ppm) | 2010 | 8.4 | ND-8.4 | TT | N/A | Various natural and manmade sources |
| Gross Alpha particle activity (pCi/L) | 2010 | 2.3 | 2.3 | 15 | (0) | Erosion of natural deposits |
| Uranium (pCi/L) | 2010 | 0.87 | 0.87 | 20 | 0.43 | Erosion of natural deposits |

*In 2007, the Naval Air Facility suspended its fluoridation program. The water plant has continued to suspend the program because fluoride is naturally present at low concentrations within its drinking water. Consumers are recommended to consult with their dentist regarding the need for fluoride supplements.

| TABLE 4A – RUNNING ANNUAL AVERAGE ON SYSTEM-WIDE BASIS TRIHALOMETHANES (TTHM) | | | | | |
|--|-------------------------|-------------------------|-------------------------|-------------------------|-------------------|
| TTHM (ppb) | 1st Quarter 2010 | 2nd Quarter 2010 | 3rd Quarter 2010 | 4th Quarter 2010 | MCL (MRDL) |
| RV Park | 15.0 | 32.0 | 16.0 | 25.0 | 80.0 |
| Building 227 | 18.0 | 26.0 | 17.0 | 28.0 | 80.0 |
| Building 504 | 73.0 | 71.0 | 56.0 | 52.0 | 80.0 |
| Building 529 | 30.0 | 74.0 | 72.0 | 58.0 | 80.0 |
| Building 436 | 24.0 | 26.0 | 16.0 | 32.0 | 80.0 |
| Quarterly Average | 32.0 | 45.8 | 35.4 | 39.0 | 80.0 |
| Running Annual Average | 53.0 | 44.3 | 44.8 | 38.1 | 80.0 |

| TABLE 5 – DETECTION OF CONTAMINANTS WITH SECONDARY DRINKING WATER STANDARD | | | | | | |
|---|--------------------|-----------------------|----------------------------|-------------------|---------------------------|---|
| Chemical or Constituent | Sample Date | Level Detected | Range of Detections | MCL (MRDL) | PHG (MCLG) (MRDLG) | Typical Source of Contaminant |
| Iron (ppb) | 2010 | 1300 | ND-1300 | 300 | N/A | Leaching from natural deposits; industrial wastes |
| Chloride (ppm) | 2010 | 120 | 98-120 | 500 | N/A | Runoff/leaching from natural deposits; seawater influence |
| Color (Units) | 2010 | 20 | ND-20 | 15 | N/A | Naturally-occurring organic materials |

| TABLE 5 (continued) – DETECTION OF CONTAMINANTS WITH SECONDARY DRINKING WATER STANDARD | | | | | | |
|---|--------------------|-----------------------|----------------------------|-------------------|---------------------------|---|
| Chemical or Constituent | Sample Date | Level Detected | Range of Detections | MCL (MRDL) | PHG (MCLG) (MRDLG) | Typical Source of Contaminant |
| Manganese (ppb) | 2010 | 120 | ND-120 | 50 | N/A | Leaching from natural deposits |
| Sulfate (ppm) | 2010 | 290 | 260-290 | 500 | N/A | Runoff/leaching from natural deposits; industrial wastes |
| Total Dissolved Solids (ppm) | 2010 | 740 | 680-740 | 1000 | N/A | Runoff/leaching from natural deposits |
| Specific Conductance (uS/cm) | 2010 | 1200 | 1100-1200 | 1600 | N/A | Substances that form ions when in water; seawater influence |

| TABLE 6 – DETECTION OF CONTAMINANTS WITH NO MAXIMUM CONTAMINANT LEVELS | | | |
|---|--------------------|-----------------------|---------------------------|
| Chemical or Constituent | Sample Date | Level Detected | Notification Level |
| Boron (ppm) | 2010 | 0.15 | 1.0 |
| Vanadium (ppb) | 2010 | ND | 50 |
| Perchlorate (ppb) | 2010 | ND | 6.0 |

| TABLE 7 –SAMPLING RESULTS SHOWING TREATMENT LEVELS OF SURFACE WATER SOURCES | |
|--|---|
| 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 0.3 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 5.0 NTU at any time. |
| Lowest monthly percentage of samples that met Turbidity Performance Standard | 100 % |
| Highest single turbidity measurement during the year | 0.23 |
| 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.

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). The website is <http://www.epa.gov/safewater/>.

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). The website is <http://www.epa.gov/safewater>.

Water Conservation Strategies

- **Take shorter showers.** Standard shower heads can use from 8 to 12 gallons of water per minute. Showering for 5 minutes instead of 10 minutes will get the job done, and can save up to 60 gallons of water. Keep in mind that showering uses less water than a bath if you limit your showers to 5 minutes. Short showers also save energy, because you'll use less hot water.
- **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'll need only ½ 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 a 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 sprinklers so only the lawn 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.**
- **Increase water-use efficiency by watering plants deeply but less often.**
- **Water only as rapidly as the soil can absorb.**
- **Adjust irrigation controllers for seasonal changes.**

