

## City of El Centro

### Water Quality Report for Year 2011

**Este reporte contiene informacion muy importante sobre su agua de beber.**

**Traduzcalo o hable con alguien que lo entienda.**

We are pleased to present to you this year Water Quality Report. Our water source is the Colorado River via the All American Canal and facilities of the Imperial Irrigation District. This report is designed to inform you about the quality of water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water.

If you have any questions about your water utility or this report, please contact **Hector Muñoz**, Water Treatment Facility Chief Operator at **(760) 337-4575**. We want our customers to be informed about their water utility. If you want to learn more about your City services, you are welcome to attend any of the regularly scheduled City Council meetings. They are held on the first and third Tuesday of the month at the El Centro City Council Chambers located at 1275 Main Street, El Centro, California.

The El Centro Water Treatment Facility routinely monitors for contaminants in your drinking water according to Federal and State laws. This report shows the results of our monitoring for the period of January 1st to December 31st, 2011.

In this report you will find many unfamiliar terms and abbreviations. To better understand these terms we have provided the following definitions:

**Parts per million (ppm) or Milligrams per liter (mg/l)** - One part per million compares to one minute in two years or a single penny in \$ 10,000.

**Parts per billion (ppb) or Micrograms per liter ( $\mu$ /l)** - One part per billion compares to one minute in 2,000 years, or a single penny in \$ 10,000,000.

**Parts per trillion (ppt) or Nanograms per liter (ng/l)** - One part per trillion compares to one minute in two million years, or a single penny in \$ 10,000,000,000.

**Picocuries per liter (pCi/L)** - Picocuries per liter is a measure of the radioactivity in water.

**Nephelometric Turbidity Unit (NTU)** - Nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is barely noticeable to an average person.

**Maximum Contaminant Level Goal (MCLG)** - MCLG is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

**Public Health Goal (PHG)** - PHG is 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 Contaminant Level (MCL)** - MCL is 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 or technologically feasible using the best available treatment technology. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

**Primary Drinking Water Standard (PDWS)** - MCLs for contaminants that affect health along with their monitoring and reporting requirements and water treatment requirements.

**Secondary Drinking Water Standard (SDWS)** - Secondary standards are in place to establish an acceptable aesthetic quality of the water.

**Treatment Technique (TT)** - Treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

**We are proud that your drinking water meets or exceeds Federal and State requirements. We have learned through our monitoring and testing that some contaminants have been detected. The United States Environmental Protection Agency (USEPA) has determined that your water IS SAFE at these levels.**

TEST RESULTS								
Contaminant	Violation Y/N	Level Detected	Range	Unit of Measure	MCL	PHG	MCLG	Likely source of contamination
<b>GENERAL CHEMICAL ANALYSIS</b>								
Chloride	None	110		ppm	500	N/A	N/A	Runoff/leaching from natural deposits; seawater influence.
Fluoride	None	0.41		ppm	2000	1000	N/A	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Sulfate	None	280		ppm	500	N/A	N/A	Runoff/ leaching from natural deposits; industrial waste.
Hardness total as CaCO <sub>3</sub>	None	350		ppm	not regulated	N/A	N/A	Generally found in surface water.
<b>DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD</b>								
Contaminant	Sample Date	Level Detected	Range	Unit of Measure	MCL	PHG	MCLG	Likely source of contamination
Aluminum	10 monthly samples in 2011	507	130-1400*	ppb	1000	600	600	Erosion of natural deposits; residue from some surface water treatment processes.
<b>DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD</b>								
Aluminum	10 monthly samples in 2011	507*	130-1400*	ppb	200	600	600	Erosion of natural deposits; residue from some surface water treatment processes.
Iron	10 monthly samples in 2011	460*	140-1100*	ppb	300	None	None	Leaching from natural deposits; industrial wastes.
<b>METALS</b>								
Contaminant	Violation Y/N	Level Detected	Range	Unit of Measure	MCL	PHG	MCLG	Likely source of contamination
Barium	None	130		ppb	1000	2000	2000	Erosion of natural deposits;
Boron	None	150		ppb	not regulated	N/A	N/A	Runoff/ leaching from natural deposits.
Magnesium	None	33		ppb	N/A	N/A		Leaching from natural deposits;
Potassium	None	5		ppm	N/A	N/A		Leaching from natural deposits;
Vanadium	None	N/D		ppb	N/A	N/A		Leaching from natural deposits;
Sodium	None	120		ppm	not regulated	N/A	N/A	Generally found in surface water.

RADIOLOGICAL CONSTITUENTS								
Contaminant	Violation Y/N	Level Detected	Range	Unit of Measure	MCL	PHG	MCLG	Likely source of contamination
Uranium	None	3.5	3.3 - 5.2	pCi/L	20	0.5	0	Erosion of natural deposits;
ORGANIC CHEMICALS CONTITUENTS								
Total Trihalomethanes	None	42.2	36.3 - 50.9	ppb	80	N/A	N/A	By-product of drinking water chlorination
Haloacetic Acids	None	18.4	12.9 - 24.8	ppb	60	N/A	N/A	By-product of drinking water chlorination
MICROBIOLOGICAL CONSTITUENTS								
Turbidity	None	0.07	.04 - .13	NTU	Treatment Technique	N/A	N/A	Soil runoff.
INORGANIC CONSTITUENTS								
Contaminant	Samples Collected	90th Percentile Level Detected	Range	Unit of Measure	Action Level	PHG	MCLG	Likely source of contamination
Copper	32	930	130 - 1100	ppb	1300	N/A	1300	Internal corrosion of household water plumbing systems;erosion of natural deposits;leaching from wood preservatives.
Lead	32	6	5.5 - 5.9	ppb	15	N/A	0	Internal corrosion of household water plumbing systems;erosion of natural deposits;leaching from wood preservatives.

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

VIOLATION OF A MCL, MRDL, AL, TT, OR MONITORING AND REPORTING REQUIREMENT					
Violation	Explanation	Duration	Actions Taken to Correct the Violation	Health Effects	Aesthetics Effects
Aluminum Secondary Standard	Canals contained high levels of sediment. (If applicable, our plant also adds an aluminum-based coagulant as part of the treatment process). Most aluminum should have been filtered out during treatment.	8 out of 10 samples in 2011	(If applicable) System began monthly or quarterly sampling of treated water to show that it is being removed below the secondary standard.	None	Aluminum levels over the secondary standard may cause colored water.
Iron Secondary Standard	Canals contained high levels of sediment. (If applicable, our plant also adds an iron-based coagulant as part of the treatment process). Most iron particles should have been filtered out during treatment.	6 out of 10 samples in 2011	(If applicable) System began monthly or quarterly sampling of treated water to show that it is being removed below the secondary standard.	None	Iron levels over the secondary standard may cause rusty color; sediment; metallic taste; reddish or orange staining.

Water systems are required to meet a strict standard for coliform bacteria. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If the standard is exceeded, the water supplier must notify the public by newspaper, television or radio.

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.

In order to ensure that tap water is safe to drink, USEPA and the California Department of Health Services (Department) 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.

MCL's are set at vary stringent levels. To understand the risk of possible health effects described for regulated contaminants, you should know that a person would have to drink 2 liters of water every day at the maximum contaminant level for a lifetime to have a one-in-a-million chance of having the described health effect.

**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. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.**

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.
- \* 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, and septic systems.
- \* Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.
- \* All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. It is important to remember that the presence of these contaminants does not necessarily pose a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

**The California Department of Health Services (DHS) sets drinking water standards and requires the disinfection of drinking water. However, when used in the treatment of drinking water, disinfectants react with naturally-occurring organic and inorganic matter present in water to form chemicals called disinfection byproducts (DBPs). DHS has determined that a number of DBPs, including some trihalomethanes (THMs) and some haloacetic acids (HAAs), have been shown to cause cancer in laboratory animals. Other DBPs have been shown to affect the liver and the nervous system, and cause reproductive or development effects in laboratory animals. Exposure to certain DBPs may produce similar effects in people. DHS has set standards to limit exposure to THMs, HAAs, and other DBPs.**

A source water assessment was conducted for the **Central Main/Soth Date Canal gate 20B** of the City of El Centro water system in February 2003.

The source is considered most vulnerable to the following activities not associated with any detected contaminants

- \* Landfills/dumps
- \* Military installations
- \* Mining operations - active
- \* Mining operations - historic
- \* Underground storage tanks - confirmed leaking tanks

**Discussion of Vulnerability**

This source is considered most vulnerable to these activities, for which no associated contaminant has been detected:

- \* Concentrated animal feeding operations
- \* Agricultural activities such as pesticide use and farm chemical distribution
- \* Mining
- \* Geothermal wells
- \* Landfills/dumps
- \* Illegal dumping

A copy of the complete 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:

Sean Sterchi, P.E.  
District Engineer  
(619) 525-4922  
(619) 525-4383 Fax