## City of El Centro Water Quality Report for Year 2012

Este reporte contiene información muy importante sobre su agua de beber.

Tradúzcalo 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, 2012.

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 ( $\mu/I$ ) - 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.

**Nephelemetric 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 technogically 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.

N/A-Not Applicable

**NL** - Notification Level

**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 RES | ULTS          |       |      |  |
|----------------------------|---------------|----------|-----------|----------|---------------|-------|------|--|
| Contaminant                | Violation     | Level    | Range     | Unit of  | MCL           | PHG   | MCLG | Likely source of   |
|                            | Y/N           | Detected |           | Measure  |               |       |      | contamination  |
| GENERAL CHEMIC             | CAL ANALYSIS  | •        |           |          | •             |       | •    |  |
| Chloride                   | None          | 120      | N/A       | ppm      | 500           | N/A   | N/A  | Runoff/leaching from natural depostis, seawater infulence.   |
| Fluoride                   | None          | 0.36     | N/A       | ppm      | 2             | 1     | N/A  | Erosion of natural deposits; water<br>additive which promtes strong teeth'<br>discharge from fertilizer and aluminum<br>factories. |
| Sulfate                    | None          | 290      | N/A       | ppm      | 500           | N/A   | N/A  | Runoff/ leaching from natural depostis; industrial waste.  |
| Hardness<br>total as CaCO3 | None          | 360      | N/A       | ppm      | not regulated | N/A   | N/A  | Generally found in surface water.  |
| METALS                     |               |          |           |          |               |       |      |  |
| Aluminum                   | None          | 0.14     | N/A       | ppm      | 1             | 0.6   | N/A  | Erosion of natural deposits;   |
| Arsenic                    | None          | 2.3      | N/A       | ppb      | 10            | 0.004 | N/A  | Erosion of natural depotits; electronic production waste   |
| Iron                       | None          | 140      | N/A       | ppb      | 300           | N/A   | N/A  | Leaching from natural deposits; industrial wastes.   |
| Barium                     | None          | 0.11     | N/A       | ppm      | 1             | 2     | N/A  | Erosion of natural deposits;   |
| Boron                      | None          | 0.15     | N/A       | ppm      | NL=1          | N/A   | N/A  | Runoff/ leaching from natural  |
| Magnesium                  | None          | 32       | N/A       | ppm      | N/A           | N/A   | N/A  | Leaching from natural deposits;  |
| Potassium                  | None          | 5.3      | N/A       | ppm      | N/A           | N/A   | N/A  | Leaching from natural deposits;  |
| Sodium                     | None          | 130      | N/A       | ppm      | N/A           | N/A   | N/A  | Generally found in surface   |
| RADIOLOGICAL C             | ONSTITUENTS   |          |           |          |               |       |      |  |
| Contaminant                | Violation     | Level    | Range     | Unit of  | MCL           | PHG   | MCLG | Likely source of   |
|                            | Y/N           | Detected |           | Measure  |               |       |      | contamination  |
| Uranium                    | None          | 3.5      | 3.3 - 5.2 | pCi/L    | 20            | 0.43  | 0    | Erosion of natural deposits;   |
| ORGANIC CHEMIC             | CALS CONTITUE | VTS      |           |          |               |       |      |  |
| Total                      | None          | 39       | 28.5-48.9 | ppb      | 80            | N/A   | N/A  | By-product of drinking water   |
| Trihalomethanes            |               |          |           |          |               |       |      | chlorination   |
| Haloacetic                 | None          | 21.8     | 12.9-38.8 | ppb      | 60            | N/A   | N/A  | By-product of drinking water   |
| Acids                      |               |          |           |          |               |       |      | chlorination   |

| CENTRAL MAIN F               | I                  |  |  |                                     |             | 1   | 1          |                                   |  |
|------------------------------|--------------------|--|--|-------------------------------------|-------------|-----|------------|-----------------------------------|--|
| Analyte                      |                    | Method   | Result   |                                     | Units       |     | Rep. Limit | MCL                               |  |
| Apparent Color               |                    | SM 2120B   | 12.5   |                                     | Color Units |     | 3.0        | 15                                |  |
| Turbidity                    |                    | EPA 180.01   | 7.5  |                                     | NTU         |     | 0.1        | 5                                 |  |
| Specific Conductance (E.C.)  |                    | SM 2510B   | 1200   |                                     | umhos/cm    |     | 2          | 1600                              |  |
| Total Filterable Residue/TDS |                    | SM 2540C   | 800  |                                     | mg/L        |     | 5          | 1000                              |  |
| SAMPLING RESUL               | TS SHOWING T       | REATMENT OF S  | SURFACE WATER  | SOURCES:                            |             |     |            |                                   |  |
| Treatment Techni             | que                |  |  |                                     |             |     |            |                                   |  |
| (Type of approved            | d filtration techr | nology used)   |  | Rapid gravity dual media filters.   |             |     |            |                                   |  |
| Turbidity Perform            |                    | Trubidity of the Filtered water must:                                  |  |                                     |             |     |            |                                   |  |
| (that must be met            | process)           | 1 - Be less than or equal to .3 NTU in 95% of measurements in a month. |  |                                     |             |     |            |                                   |  |
|                              |                    |  | 2 - Not to exceed 1.0 NTU for more than eight consecutive hours. |                                     |             |     |            |                                   |  |
|                              |                    |  |  | 3 - Not exceed 5.0 NTU at any time. |             |     |            |                                   |  |
| Lowest monthly p             | ercentage of sa    | mples that met   | Turbidity  |                                     |             |     |            |                                   |  |
| Performance Stan             |                    | 100%   |  |                                     |             |     |            |                                   |  |
| Highest single turl          | year               | 0.12   |  |                                     |             |     |            |                                   |  |
| Number of violation          | ons of any surfa   | ment requireme   | nts  | 0                                   |             |     |            |                                   |  |
| INORGANIC CONS               | STITUENTS          |  |  |                                     |             |     |            |                                   |  |
| Contaminant                  | Samples            | 90th Percen-   | Number of  | Unit of                             | Action      | PHG | MCLG       | Likely source of                  |  |
|                              | Collected          | tile Level   | samples over   | Measure                             | Level       |     |            | contamination                     |  |
|                              |                    | Detected   | the action L.  |                                     |             |     |            |                                   |  |
| Copper                       | 32                 | 0.08   | 0  | ppm                                 | 1.3         | 0.3 | N/A        | Internal corrosion of household   |  |
|                              |                    |  |  |                                     |             |     |            | water plumbing systems;erosion    |  |
|                              |                    |  |  |                                     |             |     |            | of natural deposits;leaching from |  |
|                              |                    |  |  |                                     |             |     |            |                                   |  |
| Lead                         |                    |  |  |                                     |             |     |            | wood preservatives.               |  |
|                              | 32                 | ND   | 0  | ppb                                 | 15          | 0.2 | N/A        | Internal corrosion of household   |  |
|                              |                    |  |  |                                     |             |     |            | water plumbing systems;erosion    |  |
|                              |                    |  |  |                                     |             |     |            | of natural deposits;leaching from |  |
|                              |                    |  | 1  |                                     |             |     |            | wood preservatives.               |  |

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. El centro Water Plant 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. 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 take to minimize exposure is available from the Safe Drinking Water Hotline or at: http://www.epa.gov/safewater/lead.

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-ocurring 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-ocurring 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-ocurring 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 contaminents. 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:
- k
- \* Sean Sterchi, P.E.
- \* District Engineer
- \* (619) 525-4922

(619) 525-4383 Fax