May 10, 2011

TO: **WATER CUSTOMERS**

FROM: **CITY OF IMPERIAL**

SUBJECT: **2010 ANNUAL WATER QUALITY REPORT**

CITY OF IMPERIAL WATER CUSTOMERS:

The California Domestic Water Quality and Monitoring Regulations (Title 22, California Code of Regulations) adopted January 1, 1989; require that each community water system distribute an annual report of the quality of water served to its customers. Though this is a mandated requirement, the City of Imperial welcomes the opportunity to inform its citizens of the methods of treatment and the quality of water delivered.

The City receives its water supply from the Colorado River via the All American Canal and the facilities of the Imperial Irrigation District. Our treatment process for the surface water consists of "complete" treatment including sedimentation, coagulation, flocculation, filtration and disinfection. The City currently provides nearly 4.4 million gallons per day at peak flows and over 955 million gallons of water annually to its citizens.

At the present time the City meets all applicable California Department of Health Services and Unites States Environmental Protection Agency domestic water quality standards. Water quality data for the reporting period ending December 31, 2010 is attached. Recent 2009 water quality information is available for review upon request.

A Copy of this document can also be obtained on our City website at www.cityofimperial.org.

If you desire further information or have any questions, please contact Jackie Loper at (760) 355-3336.

Imperial - Source Water Quality

Constituent (units)	PRIMARY MCL	PHG (MCLG)	Range of Detection	Average Level	MCL Violation?	Most Recent Sampling date	Typical Source of Constituent
Turbidity*							
Highest single measurement of the Treated Surface Water (NTU)	TT = 5.0	n/a	.06-.30	0.11	No	2010	Soil runoff
Lowest Percent of all Monthly Readings less than 0.5 NTU (%)	TT = 95	n/a	100	100	No	2010	Soil runoff
Inorganic Constituents						2010	
Aluminum (ug/l)	1,000	n/a	250	250	No	2010	Erosion of natural deposits; residue from some surface water treatment processes
Fluoride (ppm)	2	1	0.35	0.35	No	2010	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Radioactive Constituents							
Gross Alpha particle activity (pCi/l)	15	n/a	n/a	N/D	No	2010	Erosion of natural deposits
Uranium (pCi/l)	20	n/a	n/a	3.7	No	2010	Erosion of natural deposits
Constituent (units)	**SECONDARY MCL**	**PHG (MCLG)**	**Range of Detection**	**Average Level**	**MCL Violation?**	**Most Recent Sampling date**	**Typical Source of Constituent**
Total Akkalinity (as CaCO3) (mg/L)	Not Regulated	n/a	170	170	No	2010	Leaching from natruial deposits
Arsenic (ppm)	50	n/a	N/D	N/D	No	2010	Naturally-occurring organic materials
Barium (ug/l)	1000	-2	130	130	No	2010	Discharge of oildrilling waste from metal refieries:erosionof natural deposits
Bicarbonate	Not Regulated	n/a	170	170	No	2010	Leaching from natruial deposits
Iron (ug/l)	300	n/a	200	200	No	2010	Leaching from natural deposits; industrial wastes
Manganese(ug/l)	50	n/a	n/d	n/d	No	2010	Leaching from natruial deposits
Color (units)	15	n/a	12.5	12.5	No	2010	Naturally-occurring organic materials
Odor Threshold (Units)	3	n/a	2	2	No	2010	Naturally-occurring organic materials
Total Dissolved Solids (ppm)	1,000	n/a	770	770	No	2010	Runoff/leaching from natural deposits
Specific Conductance (micromhos)	1,600	n/a	1200	1200	No	2010	Substances that form ions when in water; seawater influence
Chloride (ppm)	500	n/a	130	130	No	2010	Runoff/leaching from natural deposits; seawater influence
Silver	2	n/a	N/D	N/D	No	2010	Runoff/leaching from natural deposits; seawater influence
Sulfate (ppm)	500	n/a	280	280	No	2010	Runoff/leaching from natural deposits; industrial wastes
pH (pH units)	Not Regulated	n/a	8.4	8.4	n/a	2010	Leaching from natural deposits
Unregulated Constituent Requiring monitoring (units)	**MCL**	**PHG (MCLG)**	**Range of Detection**	**Average Level**	**MCL Violation?**	**Most Recent Sampling date**	**Typical Source of Constituent**
Hardness as CaCO3 (ppm)	Not Regulated	n/a	320	320	n/a	2010	Leaching from natural deposits
Vanadium (ug/l)	Not Regulated	n/a	4.1	4.1	n/a	2010	Leaching from natural deposits
Sodium (ppm)	Not Regulated	n/a	120	120	n/a	2010	Leaching from natural deposits
Potassium (ppm)	Not Regulated	n/a	4.9	4.9	n/a	2010	Leaching from natural deposits
Calcium (ppm)	Not Regulated	n/a	93	93	n/a	2010	Leaching from natural deposits
Boron (ug/l)	Not Regulated	n/a	210	210	n/a	2010	Leaching from natural deposits
Magnesium (ppm)	Not Regulated	n/a	29	29	n/a	2010	Leaching from natural deposits
Perchlorate (ppb)	Not Regulated	4	N/D	N/D	n/a	2010	Perchlorate is a chemical used by industries in the manufacturing of rocket fuels, pyrotechnics (fireworks), matches, pharmaceuticals, and as a lab-grade chemical.

Distribution System Water Quality

Micobiological Contaminents (units)	PRIMARY MCL	PHG (MCLG)	Value	MCL Violation?	Most Recent Sampling date	Typical Source of Constituent
Total Coliform Bacteria (% of monthly positive samples)	More than 5% of monthly samples are positive	(0)	0	No	2010	Naturally present in the environment
Fecal coliform and E. coli Bacteria (number of monthly positive samples)	A routine sample and a repeat sample are total coliform positive, and one is also fecal coliform or E. coli positive	(0)	0	No	2010	Human and animal fecal waste
TTHM Total Trihalomethanes(ppb)	80	80	53.9-60.0 57.8	No	2010	Byproduct of drinking waterdisinfection

UG/L= MICROGRAMS PER LITER (PARTS PER BILLION)
MG/L=MILLIGRAMS PER LITER (PARTS PER MILLION)
N/A=NONE AVAILABLE

MAXIMUM CONTAMINANT LEVEL(MCL): The highest level of contaminant that is allowed in drinking water. Primary MCL's 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.

PRIMARY DRINKING WATER STANDARD or PDWS: MCLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

TREATMENT TECHNIQUE: a required process intended to reduce the level of a contaminant in drinking water.

REGULATORY ACTION LEVEL: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

VARIANCES AND EXEMPTIONS: State or EPA permission no to meet an MCL or a treatment technique under certain conditions.

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 be the 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, agricultural application and septic systems.

RADIOACTIVE CONTAMINANTS: that can be naturally-occurring or be the result of oil and gas production and mining activities.

SECONDARY DRINKING WATER STANDARDS (SDWS) MCLs for contaminants that affect health along with their monitoring and reporting requirements and water treatment requirements.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) and the State 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 provide the same protection of public health.

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 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 lessen the risk of infection by Cryptosporidum and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).