Reader’s Guide

The focal point of the water quality report is a table that lists the actual results of year-round monitoring for more than 120 constituents. Only the constituents that are found are listed in the table. Bottled water is not covered in this report.

By reading the table from left to right, you will learn the quantity of a constituent found in Santa Ana’s water supply and how that compares with the allowable state and federal limits.

You’ll also learn the range and average of the constituent measured as well as its origin. The questions and answers on this page, numbers 2 through 7, will explain the important elements of the table found on the charts.

20% Post-Consumer Waste

(Read this important health information about drinking water contaminants.)

Your Water, Your Safety

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. You can learn more about contaminants and potential health effects by calling the U.S. Environmental Protection Agency’s (USEPA) Safe Drinking Water Hotline at 800-426-4791 or visiting their website at epa.gov/safewater/.

To ensure that tap water is safe to drink, the USEPA prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water. Both sets of requirements protect public health. 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/CDC (U.S. Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline 800-426-4791. Cryptosporidium is a microbially pathogen found in surface water throughout the U.S. To date, Cryptosporidium has not been detected in our water supply.

Beginning in October 2007, water that is received by the City of Santa Ana from MWD will have fluoride added to it. Our well water currently has a naturally occurring fluoride range level of 0.18 to 0.56 ppm. Water provided by MWD will have a fluoride level of 0.7 to 0.8 ppm. This plan was approved by the CDC and the California Department of Public Health. Additional information may be found by calling MWD’s Water Quality Information Hotline at 800-354-4420, or by visiting the following websites: mwdh2o.com/fluoridation or ada.org/fluoride.aspx.

1. What are the sources of the water Santa Ana delivers?

The City of Santa Ana depends on two sources for the 16.3 billion gallons of water we supply each year—62% is groundwater and 38% is imported water, purchased from the Metropolitan Water District of Southern California (MWD).

The groundwater accumulates and is stored beneath the surface of the earth and then pumped to the surface by 20 city-owned wells. MWD brings Colorado River water from Lake Havasu and runoff from the snow pack in the Sierra Nevada Range in Northern California. The water is then treated at either the Diemer Filtration Plant in Yorba Linda or the Weymouth Filtration Plant in LaVerne before it is delivered to Santa Ana.

There are seven MWD connections located in the City. Most of our customers receive a blending of the two sources, groundwater and imported water. For more details, see the Water Quality Standard for each of these sources in the data that follows. Groundwater and imported water are listed in separate columns.

About Your Drinking Water

2. What’s in my drinking water?

Your tap water may contain different types of chemicals (organic and inorganic), microscopic organisms (e.g., bacteria, algae, viruses) and radioactive materials (radionuclides), many of which are naturally occurring. Health agencies require monitoring for these contaminants, because at certain levels they could make a person sick. The column marked “Parameter” lists the constituents found in the water used by Santa Ana.

3. What are the maximum allowed levels for constituents in drinking water?

Health agencies have maximum contaminant levels for constituents so that drinking water is safe and looks, tastes and smells good. A few constituents have the letters “TT” in the MCL column because they do not have a numerical MCL. Instead, they have certain treatment requirements.
important information about drinking water

monitoring requirements not met for the city of santa ana

there are many monitoring requirements imposed on every public water system. our water system staff failed to adequately meet these requirements on one occasion this past year, and therefore the city's water system was in violation of these regulations. it is important to note that this was not a violation caused by having contaminants exceed allowable levels, rather it was a violation caused by failing to take the required number of samples within a specific time frame. even though this failure was not an emergency, as our customers, you have the right to know what you should do, what happened, and what we did to correct this situation. this notice is intended to provide you with this information.

we are required to monitor your drinking water for specific contaminants on a regular basis. results of regular monitoring are an indicator of whether or not our drinking water meets health standards. during a period of april 22 to 26, 2010, we did not take the required number of repeat bacteriological samples required under title 22 california code of regulations, section 64424(c), and therefore cannot be sure of the quality of our drinking water during that time.

what should i do?

1. there is nothing you need to do at this time. 2. the table below lists the contaminant we did not properly test for during the last year, how many samples we are required to take and how often, how many samples we took, when samples should have been taken, and the date on which follow-up samples were taken.

what happened? what is being done?

we have provided additional training to our staff so that there is no misunderstanding in the proper time frame and amount of repeat samples required when a positive bacteriological sample has been reported by the laboratory. we have performed and continue to perform all of the required water system monitoring required under title 22 to ensure the water provided to our customers is in full compliance with all regulations. for more information, please contact water resources at 714-647-3320 or write to: city of santa ana, 220 s. daisy avenue, santa ana, ca 92703.

important information about drinking water

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### THE FOUR TERMS TO EXAME:

**Primary Standards**—Mandatory Health-Related Standards that may cause health problems in drinking water.

**Secondary Standards**—Aesthetic Standards (non-health-related) that could cause odor, taste, or appearance problems in drinking water.

**Unregulated Parameters**—Information about contaminants that are monitored but are not currently regulated by federal and state health agencies.

**Additional Parameters**—Information that may also be of interest to our customers.

### WATER QUALITY DATA

#### PRIMARY STANDARDS—MANDATORY HEALTH-RELATED STANDARDS

<table>
<thead>
<tr>
<th>Parameter</th>
<th>MCL (ppb)</th>
<th>PHG (MCLG)</th>
<th>Imported Water</th>
<th>Groundwater</th>
<th>Typical Source Of Contamination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combined Fertilizer Effluent Turbidity (NTU)</td>
<td>0.3</td>
<td>NA</td>
<td>Highest</td>
<td>0.06</td>
<td>NR</td>
</tr>
<tr>
<td>Combined Fertilizer Effluent Turbidity (%)</td>
<td>95%</td>
<td>NA</td>
<td>0-0.3</td>
<td>100</td>
<td>NR</td>
</tr>
<tr>
<td>Turbidity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Sol run off</td>
</tr>
</tbody>
</table>

#### INORGANIC CHEMICALS

<table>
<thead>
<tr>
<th>Parameter</th>
<th>MCL (ppb)</th>
<th>PHG (MCLG)</th>
<th>Imported Water</th>
<th>Groundwater</th>
<th>Typical Source Of Contamination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper (ppb)</td>
<td>1.3</td>
<td>NA</td>
<td>ND</td>
<td>0.19</td>
<td>0</td>
</tr>
<tr>
<td>Nitrate and Nitrite (as N)</td>
<td>10</td>
<td>10</td>
<td>ND</td>
<td>ND</td>
<td>2.44</td>
</tr>
</tbody>
</table>

#### SPECIAL EDUCATIONAL STATEMENT REGARDING NITRATE:

Nitrate levels may rise quickly for short periods of time because of nitrification or agricultural activity. Nitrate in drinking water at levels above 40 mg/L is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant’s blood to carry oxygen, resulting in a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 45 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, you should avoid water from your health care provider.

(a) The turbidity level of the filtered water shall be less than or equal to 0.3 NTU in 95% of the measurements taken each month and shall not exceed 1 NTU at any time. The averages and ranges of turbidity shown in the Secondary Standards were based on the treatment plant effluent.

(b) The Stage 2 required raw water coliform monitoring for all treatment plants beginning March 2008. Reporting level is 1 CFU/100mL for total coliform and E.

(c) The State required raw water coliform monitoring for all treatment plants beginning March 2008. Reporting level is 1 CFU/100mL for total coliform and E.

(d) The Stage 2 Disinfectants/Disinfection By-Products (D/DBP) Rule’s IDSE was conducted between May 2007 and March 2008 for total trihalomethanes (TTHMs) and haloacetic acids (HAA5) in conjunction with Stage 1 D/DBP Rule’s compliance monitoring. All TTHM and HAA5 values from the 19 IDSE specific samples were within the range of values reported for Metropolitan’s distribution system. Information on these samples is available upon request from the Metropolitan Water District of Southern California.

### ABBREVIATIONS

- **MCL**: Mandatory Health-Related Standard—Mandatory Health-Related Standards that may cause health problems in drinking water.
- **PHG**: Public Health Goal—Primary Health Goals that are used in the United States to assess the health effects of contaminants in drinking water.
- **NS**: Not required—Unregulated Parameter—Information that may also be of interest to our customers.
- **NL**: Notification level—Unregulated Parameter—An indication to health professionals that a constituent is present in the water supply and that further investigation is warranted.
- **MCLG**: Maximum Contaminant Level Goal—Mandatory Health-Related Standards that may cause health problems in drinking water.
- **PHLG**: Primary Health Goal—Primary Health Goals that are used in the United States to assess the health effects of contaminants in drinking water.
- **TTHMs**: Trihalomethanes—Groups of disinfection by-products formed when organic compounds and chlorine are applied to drinking water, and which may cause respiratory distress.
- **HAA5**: Haloacetic Acids—Groups of disinfection by-products formed when organic compounds and chlorine are applied to drinking water, and which may cause respiratory distress.
- **MRDL**: Maximum Residual Disinfectant Level—Mandatory Health-Related Standards that may cause health problems in drinking water.
- **MRDLG**: Maximum Residual Disinfectant Level Goal—Mandatory Health-Related Standards that may cause health problems in drinking water.

### TERMS AND ABBREVIATIONS

The following glossary of definitions will help you understand the terms and abbreviations used in this report.

**Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set close to the PHGs (or MCLGs) as it 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 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.

**Primary Residual Disinfectant Level (MRDL):** The level of a disinfectant added for water treatment that may not be exceeded at the consumer’s tap.

**Primary 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 USEPA.

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

**Treatment Technique (TT):** 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 that a water system must follow. The adjacent table lists data on the levels of regulated contaminants that were detected in our water supply from January 1 through December 31, 2007. The presence of these contaminants in the drinking water does not necessarily indicate that the water poses a health risk.
El siguiente glosario de términos le ayudará a entender los términos y abreviaturas usadas en este reporte.

**Nivel Máximo de Contaminante (MCLG):** Es el nivel de un contaminante presente en el agua potable cuyo nivel no presenta riesgo conocido ni esperado para la salud.

**Meta de Nivel Máximo de Contaminante (MCL):** Es el nivel de un contaminante presente en el agua potable cuyo nivel no presenta riesgo conocido ni esperado para la salud.

**Nivel Máximo de Residuo de Desinfectante (MRDL):** Es el nivel de desinfectante añadido para el tratamiento del agua que no debe de estar excedido en el grifo del consumidor.

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**Técnica de Tratamiento (TT):** Un proceso requerido para reducir el nivel de un contaminante en el agua potable.

**Nivel Acción Regulatoria:** Es la concentración de un contaminante que, si se excede, desencadena un tratamiento u otros requisitos que deben de tener seguimiento en un sistema de agua. La tabla adjunta lista los datos de los niveles de contaminantes regulados que fueron detecados en nuestro suministro de agua desde enero 1 hasta diciembre 31 del 2007. La presencia de estos contaminantes en el agua potable no indica necesariamente que el agua plantea un riesgo a la salud.

**How To Read Your Water Meter**

Your water meter is usually located between the sidewalk and curb under a cement cover. Remove the cover by inserting a screwdriver in the hole in the lid and then carefully lift the cover. The meter reads straight across. Use the odometer on your car. Read only the white numbers. If you are trying to determine if you have a leak, turn off all the water in your home, both indoor and outdoor faucets, and then check the dial for any movement of the numbers. If there is movement, that indicates a leak between the meter and your plumbing system.

**Unregulated Parameters That May Be Of Interest To Our Customers**

**Unregulated Parameters That May Be Of Interest To Our Customers**

**Additional Parameters That May Be Of Interest To Our Customers**