

# Readers Guide to the Water Quality Table

The cornerstone of the water quality report is a table that lists the results of year-round monitoring for more than 400 constituents. **Only the constituents that are found are listed in the table. Metropolitan's water met all primary drinking water standards in 2010.**

By reading the table from left to right, you will learn the quantity of a constituent found in Metropolitan's water and how that compares with the allowable state and federal limits. You will also see the measured range and average of the constituent and where it likely originated.

**The questions and answers on this page lettered A through I, will explain the important elements of the table.**

## **A What are the sources of the water Metropolitan delivers?**

Metropolitan imports water from both the Sacramento-San Joaquin Delta via the State Water Project, and the Colorado River via the Colorado River Aqueduct. The table shows the percentage of the total water delivered by Metropolitan that is from the State Water Project. The remainder is from the Colorado River.

## **B What is in my drinking water?**

Your water may contain different types of chemicals (organic and inorganic), microscopic organisms (e.g., bacteria, algae, protozoa, and viruses) and radioactive materials (radionuclides), many of which are naturally-occurring. Health agencies require monitoring for these constituents, because at certain levels they could result in short- and long-term health risks. The column marked "Parameter" lists the constituents found in the water from Metropolitan's treatment plants.

## **C How are constituents reported?**

"Units" describe how a constituent is reported. Usually constituent levels are measured in extremely tiny quantities such as a part per million, part per billion and in some cases, part per trillion. Even small concentrations of certain constituents can be a health concern. That is why regulatory standards are set at very low levels for certain constituents.

## **D What are the maximum allowed levels for constituents in drinking water?**

Health agencies have maximum contaminant levels (MCLs) for constituents so that drinking water is safe and looks, tastes and smells good. A few constituents have the letters "TT" (Treatment Technique) in the MCL column because they do not have a numerical MCL. Instead, they have certain treatment requirements that have to be met to reduce their levels in drinking water. One of the constituents, total chlorine residual, has an MRDL (maximum residual disinfection level) instead of an MCL. The MRDL is the level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap. While disinfectants are necessary to kill harmful microbes, drinking water regulations protect against too much disinfectant being added. Another constituent, turbidity, has a requirement that 95 percent of the measurements taken must be below a certain number. Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the efficiency of our filtration system.

## **E Why are some of the constituents listed in the section labeled "Primary Standards" and others in the "Secondary Standards" section?**

Constituents that are grouped in the primary standards section may cause health problems at certain levels. In general, if the average amount of a constituent is greater than the MCL, the water may not be safe to drink.

Constituents that are grouped under the secondary standards section can affect the appearance, taste and smell of water. These substances do not affect the safety of the water unless they also have a primary standard. Some constituents (e.g., aluminum) have two different MCLs, one for health-related impacts, and another for non-health-related impacts.

## **F What are Public Health Goals (PHG) and Maximum Contaminant Level Goals (MCLG)?**

PHGs and MCLGs are targets or goals set by regulatory agencies for the water industry. They define a constituent level in the water that does not pose any significant threat to health. It is oftentimes not possible to remove or reduce constituents to the level of PHGs and MCLGs because it is technologically impossible or the cost for treatment is so expensive that it would make tap water unaffordable. That is why PHGs and MCLGs are considered goals to work toward, and not realistic standards that can be enforced.

## **G How do I know how much of a constituent is in my water and if it is at a level that is safe?**

With a few exceptions \*\*, if the AVERAGE amount of a constituent found in tap water over the course of a year is no greater than the MCL, then the regulatory requirements are considered to be satisfied. The highest and very lowest levels measured over a year are shown in the RANGE. Requirements for safety, appearance, taste and smell are based on the AVERAGE levels recorded and not the RANGE.

Water agencies have specific procedures to follow if a constituent is found at levels higher than the MCL and considered a potential threat to public health. News is shared immediately with the regulatory agencies and broadcast to the public, usually via the news media. If there is no health threat but standards are exceeded, the situation is reported to the regulatory agencies and noted in this annual water quality report.

**\*\*Some constituents have special rules described in the footnotes to the water quality table. Constituents that have the letters "TT" instead of a numerical MCL meet the drinking water standard if there is also a "TT" in the columns designated as "H."**

## **H What are the testing results for each of Metropolitan's treatment plants?**

Metropolitan operates five water treatment plants to treat and disinfect water from Northern California and the Colorado River. The monitoring results for the water delivered by each of the plants are listed. Typically the F.E. Weymouth Water Treatment Plant serves parts of Los Angeles County, the San Gabriel Valley and areas of Orange County. The Robert B. Diemer Water Treatment Plant also provides treated water to areas of Orange County and coastal Los Angeles. The Joseph Jensen Water Treatment Plant supplements local water supplies in the San Fernando Valley, Ventura County and Central Los Angeles. The Robert A. Skinner Water Treatment Plant serves western Riverside County and Moreno Valley and supplies much of San Diego's treated and raw water needs. Finally, the Henry J. Mills Water Treatment Plant also serves western Riverside County and Moreno Valley.

## **I How do constituents get into the water supply?**

The most likely source for each constituent is listed in the last column of the table. Some constituents are natural and come from the environment, others come from cities and farms, and some result from the water disinfection process itself. Some chemicals have found their way into California's water supplies, making water treatment more difficult. Certain industrial processes -- like dry cleaning, fireworks and rocket fuel manufacturing -- have left constituents in the environment, as has the use of certain fertilizers and pesticides. Many of these chemicals have since been banned from use.

