



# City of Chino Hills

2013

## WATER QUALITY REPORT



### *Important Information About the Quality of Your Drinking Water*

**Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.**

此份有关你的食水报告,内有重要资料和讯息,请找他人为你翻译及解释清楚。

**Mahalaga ang impormasyong ito. Mangyaring ipasalin ito.**

이 안내는 매우 중요합니다.  
본인을 위해 번역인을 사용하십시오.

# INTRODUCTION

This is the 22nd annual Consumer Confidence Report (CCR) describing the features and quality of our drinking water supply. State Law requires all water retailers to inform their customers as to the quality of the water delivered. The City of Chino Hills is dedicated to providing you with a safe and reliable supply of high-quality drinking water.

Our bodies are made up of 60 percent water. We can only live one week without water, but we could go an entire month without food. The water we drink today is over one billion years old; it simply moves through the water cycle. While the earth is covered by more than 70 percent water, only 3 percent is fresh water, and only 1.7 percent of this fresh water is drinkable. Most water usage, 80 percent, is used outdoors to irrigate our landscapes and lawns. Only 20 percent is actually used indoors for such uses as drinking, laundry, and bathing. Therefore, we need to learn how to live with the water supply we have as new water does not exist.

The City of Chino Hills uses two sources for its drinking water - surface water and groundwater. Some of the surface water originates from the Bay Area while the rest comes from the Colorado River. Regardless of source, before reaching your faucet, all water undergoes an extensive treatment and testing process as dictated by the California Department of Public Health (CDPH) and the U.S. Environmental Protection Agency (U.S. EPA).

The availability of surface and groundwater is also dependent upon the climate. In years of low precipitation, the amount of water available is reduced and the need to reduce our consumption becomes paramount. As an example, the State of California's precipitation has dipped to historic low levels, causing the Governor to proclaim a Drought State of Emergency on January 17, 2014. This proclamation also directed that "Local urban water suppliers and municipalities are called upon to implement their local water shortage contingency plans immediately to avoid or forestall outright restrictions that could become necessary later in the drought season."

The City of Chino Hills promptly and diligently responded to the call for enhanced conservation. On February 11, 2014, the Chino Hills City Council unanimously declared a Stage II – Moderate Water Conservation alert. Stage II Alert information and water usage restrictions are noted on the City's website at [www.chinohills.org/WaterAlert](http://www.chinohills.org/WaterAlert). It is imperative that we do our part to conserve this most valuable resource for future generations. Make water conservation a way of life.

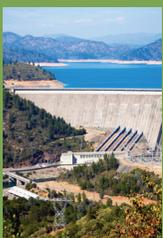
For more information on how you can conserve water, contact our Utility Conservation Coordinator at (909) 364-2804 or via email at [publicworks@chinohills.org](mailto:publicworks@chinohills.org).

## WHERE DOES CHINO HILLS' WATER COME FROM?

The City's water sources are comprised of surface water, supplied by the Metropolitan Water District (MWD) via the Water Facilities Authority (WFA); and groundwater that is pumped through City-owned wells, Monte Vista Water District (MVWD) wells, and Chino Basin Desalter Authority (CDA) wells.

Water enters the City of Chino Hill's distribution system from the Chino Basin Desalter Authority, Water Facilities Authority, Monte Vista Water District, and from City wells via transmission lines. The water then enters a distribution network where it is pressurized and delivered to local homes and businesses for use.

**Local Groundwater:** This source of water comes from underground water-bearing soil called an aquifer. This water originated from rain, snow, and irrigation systems. Over several years, water from those sources will percolate through the soil and reach the groundwater table. The ground acts as a large filter, so that only chlorination is normally required to produce safe drinking water at the well site. The City's groundwater supply is comprised of City-owned wells in Chino, Chino Desalter Authority wells in Chino, and Monte Vista Water District wells in Montclair.



**Surface Water:** The City purchases and imports treated surface water via the Water Facilities Authority in Upland and the Monte Vista Water District in Montclair. The source of the surface water is the State Water Project, which provides water from Northern California through the California Aqueduct system.

### Watering Your Lawn

Water your lawn two to three days a week instead of five days a week to conserve water.

### Check for Leaks

Check your sprinkler system for leaks, over-spray, and broken sprinkler heads, and repair promptly.

### Mulch!

Save hundreds of gallons of water a year by using organic mulch around plants to reduce evaporation.

## HOW SAFE DRINKING WATER LEVELS ARE SET

The Federal Safe Drinking Water Act of 1974, and its 1986 amendment, are intended to ensure the quality of our nation's water supplies. In order to ensure that tap water is safe to drink, the U.S. EPA and the CDPH prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. CDPH's Food and Drug Branch regulations establish limits for contaminants in bottled water that provide the same protection for public health.



## SPECIAL NOTE TO PERSONS WITH COMPROMISED IMMUNE SYSTEMS

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-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. U.S. EPA and Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at 1(800) 426-4791.

Abbreviations:

mS/cm = microsiemens

N/A = not applicable

ND = not detectable at testing limit

ppb = parts per billion or micrograms per liter

ppm = parts per million or milligrams per liter

ppt = parts per trillion

TT = Treatment Techniques

AL = Action Level

NL = Notification Level

pCi/L = picocuries per liter (a measure of radiation)

NTU = Nephelometric Turbidity Units

TON = Threshold Odor Number

TDS = Total Dissolved Solids

UCMR = Unregulated Contaminant Monitoring Rules

Umho/cm = micromhos per centimeter

## 2013 WATER QUALITY RESULTS

| Parameters [units]  | State MCL [DLR] | PHG [MCLG] | Range and Average | Chino Hills Water System |                  |                   | Typical Source of Contaminant   |
|---|-----------------|------------|-------------------|--------------------------|------------------|-------------------|---|
|   |                 |            |                   | Chino Hills Wells        | Chino 1 Desalter | Monte Vista Water |   |
| <b>PRIMARY STANDARDS - Mandatory Health Related Standards, Sampled 2010-2013, No MCL Violations</b> |                 |            |                   |                          |                  |                   |   |
| <b>INORGANIC CONTAMINANTS</b>   |                 |            |                   |                          |                  |                   |   |
| Aluminum [ppm]  | 1               | 0.6        | Range             | 0 - .13                  | N/A              | ND - .3           | Residue from water treatment process; erosion of natural deposits   |
|   |                 |            | Average           | .026                     | ND               | .031              |   |
| Arsenic [ppb]   | 10              | 0.004      | Range             | 0 - 10                   | N/A              | ND - 5.9          | Erosion of natural deposits; glass and electronics production wastes  |
|   |                 |            | Average           | 4                        | ND               | 1.8               |   |
| Barium [ppm]  | 1               | 2          | Range             | 0 - .14                  | N/A              | ND - .064         | Oil and metal refineries discharge; erosion of natural deposits   |
|   |                 |            | Average           | 0.028                    | ND               | .033              |   |
| Chromium [ppb]  | 50              | [100]      | Range             | 2.5 - 8.7                | N/A              | ND - 5.3          | Discharge from steel, pulp mills and chrome plating; erosion of natural deposits                            |
|   |                 |            | Average           | 6                        | ND               | 2.6               |   |
| Copper [ppm]  | AL = 1.3        | 0.3        | Range             | 0 - .079                 | N/A              | ND - .10          | Erosion of natural deposits; leaching from wood preservatives   |
|   |                 |            | Average           | .016                     | ND               | 0.01              |   |
| Fluoride [ppm]  | 2               | 1          | Range             | 0.2 - 0.8                | N/A              | ND - .27          | Erosion of natural deposits, water additive; discharge from fertilizer/aluminum factories                   |
|   |                 |            | Average           | 0.3                      | 0.2              | 0.12              |   |
| Lead [ppb]  | AL = 15         | 0.2        | Range             | 0 - 6.5                  | N/A              | ND - 8.4          | Discharge from industrial manufacturers; erosion of natural deposits  |
|   |                 |            | Average           | 1.3                      | ND               | 0.23              |   |
| Nitrate (as NO <sub>3</sub> ) [ppm]   | 45              | 45         | Range             | 12 - 38                  | N/A              | 2.1 - 7           | Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits |
|   |                 |            | Average           | 30                       | 14               | 5.1               |   |
| Perchlorate [ppb]   | 6               | 6          | Range             | 0 - 4.1                  | N/A              | ND - 5.8          | Industrial waste discharge  |
|   |                 |            | Average           | 0.12                     | ND               | 1.4               |   |
| Selenium [ppb]  | 50              | 30         | Range             | 0 - 15                   | N/A              | ND                | Refineries, mines, and chemical waste discharge; runoff from livestock                                      |
|   |                 |            | Average           | 4                        | ND               | ND                |   |
| <b>SYNTHETIC ORGANIC CONTAMINANTS</b>   |                 |            |                   |                          |                  |                   |   |
| Dibromochloropropane (DBCP) [ppt]   | 200             | 1.7        | Range             | ND                       | N/A              | ND - 0.11         | Banned nematocide that may still be present in soils due to leaching from former agriculture uses           |
|   |                 |            | Average           | ND                       | ND               | 0.03              |   |

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 TT = Treatment Techniques  
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NTU = Nephelometric Turbidity Units  
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| Parameters [units]  | State MCL [DLR] | PHG [MCLG] | Range and Average | Chino Hills Water System |                  |                   | Typical Source of Contaminant                   |
|---|-----------------|------------|-------------------|--------------------------|------------------|-------------------|---|
|   |                 |            |                   | Chino Hills Wells        | Chino 1 Desalter | Monte Vista Water |   |
| <b>PRIMARY STANDARDS - Mandatory Health Related Standards, Sampled 2010-2013, No MCL Violations</b> |                 |            |                   |                          |                  |                   |   |
| <b>DISINFECTION BYPRODUCTS, DISINFECTION RESIDUALS, AND DISINFECTION BYPRODUCTS PRECURSORS</b>      |                 |            |                   |                          |                  |                   |   |
| Total Trihalomethanes* [ppb]  | 80              | N/A        | Range             | 0 - 27                   | N/A              | ND - 69           | Byproduct of drinking water disinfection        |
|   |                 |            | Average           | 35                       | ND               | 27                |   |
| Haloacetic Acids* [ppb]   | 60              | N/A        | Range             | 0 - 4                    | N/A              | ND - 17           | Byproduct of drinking water disinfection        |
|   |                 |            | Average           | 6                        | ND               | 3.8               |   |
| Control of DBP precursors [TOC]   | TT              | N/A        | Range             | ND                       | N/A              | TT                | Various natural and man-made sources            |
|   |                 |            | Average           | ND                       | ND               | TT                |   |
| Total Chlorine Residual System [ppm]  | 4               | 4          | Range             | .21 - 1.28               | N/A              | .15 - 1.21        | Drinking water disinfectant added for treatment |
|   |                 |            | Average           | 0.41                     | N/A              | 0.68              |   |
| <b>MICROBIOLOGICAL CONTAMINANTS</b>   |                 |            |                   |                          |                  |                   |   |
| Total Coliform Bacteria   | 5% per month    | [0]        | Range             | ND - 1                   | ND               | ND                | Naturally present in the environment            |
|   |                 |            | Average           | 0.09                     | ND               | ND                |   |
| Fecal Coliform and E. Coli  | (a)             | [0]        | Range             | ND                       | ND               | ND                | Human and animal fecal waste                    |
|   |                 |            | Average           | ND                       | ND               | ND                |   |
| <b>RADIOLOGICAL CONTAMINANTS</b>  |                 |            |                   |                          |                  |                   |   |
| Gross Alpha [pCi/L]   | 15              | [0]        | Range             | .85 - 6.44               | N/A              | ND - 4.4          | Erosion of natural deposits                     |
|   |                 |            | Average           | 3                        | ND               | 1.5               |   |
| Gross Beta [pCi/L]  | 50              | [0]        | Range             | ND                       | N/A              | ND - 4            | Decay of natural and man-made deposits          |
|   |                 |            | Average           | ND                       | ND               | ND                |   |
| Uranium [pCi/L]   | 20              | 0.43       | Range             | ND                       | N/A              | ND - 3.1          | Erosion of natural deposits                     |
|   |                 |            | Average           | ND                       | ND               | 0.8               |   |

Footnotes:

(a): Fecal coliform/E.coli; MCLs: The occurrence of two (2) consecutive total coliform-positive samples, one of which contains fecal coliform/E.coli, constitutes an acute MCL violation. The MCL was not violated in 2013. (b): Aluminum has both primary and secondary standards. The City strives to deliver water levels well below the set MCL. \*Trihalomethanes and Haloacetic Acids are a collection of sample results taken throughout the City from imported and blended water as a blended supply of all water.

The Water Quality table lists all drinking water contaminants that were detected during the 2013 calendar year. The presence of the contaminants in the water does not necessarily indicate that the water poses or did pose a health risk. Unless otherwise noted, the data presented in this table is from testing conducted January 1, 2013 through December 31, 2013. The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, is more than one year old.

| Parameters [units]  | State MCL [DLR] | PHG [MCLG] | Range and Average | Chino Hills Water System |                  |                   | Typical Source of Contaminant                                |
|---|-----------------|------------|-------------------|--------------------------|------------------|-------------------|--|
|   |                 |            |                   | Chino Hills Wells        | Chino 1 Desalter | Monte Vista Water |  |
| <b>SECONDARY STANDARDS - Aesthetic Standards - Sampled 2010-2013, No MCL Violations</b> |                 |            |                   |                          |                  |                   |  |
| Aluminum [ppb]  | 200             | N/A        | Range             | ND                       | N/A              | ND - 300          | Erosion of natural deposits; residue from some surface water |
|   |                 |            | Average           | ND                       | ND               | 31                |  |
| Color [Units]   | 15              | N/A        | Range             | 0-3                      | N/A              | ND - 10           | Naturally-occurring organic material                         |
|   |                 |            | Average           | 0.6                      | ND               | 0.3               |  |
| Chloride [ppm]  | 500             | N/A        | Range             | 9.5 - 65                 | N/A              | 9 - 79            | Runoff/leaching from natural deposits and seawater influence |
|   |                 |            | Average           | 29                       | 82               | 41                |  |
| Iron [ppb]  | 300             | N/A        | Range             | 0 - 270                  | N/A              | ND - 290          | Leaching from natural deposits; industrial waste             |
|   |                 |            | Average           | 54                       | ND               | 18                |  |
| Manganese [ppb]   | 50              | N/A        | Range             | ND                       | N/A              | ND - 10           | Leaching from natural deposits                               |
|   |                 |            | Average           | ND                       | ND               | 0.4               |  |
| MBAS [ppb]  | 500             | N/A        | Range             | ND                       | N/A              | ND - 48           | Municipal and industrial waste discharges                    |
|   |                 |            | Average           | ND                       | 50               | 35                |  |
| Odor-Threshold [Units]  | 3               | N/A        | Range             | ND                       | N/A              | ND - 2            | Naturally-occurring organic material                         |
|   |                 |            | Average           | ND                       | ND               | 1                 |  |
| Specific Conductance [mS/cm]  | 1,600           | N/A        | Range             | 320 - 1100               | N/A              | 370 - 630         | Substances that form ions when in water; seawater influence  |
|   |                 |            | Average           | 616                      | 550              | 491               |  |
| Sulfate [ppm]   | 500             | N/A        | Range             | 22 - 220                 | N/A              | 30 - 58           | Runoff/leaching from natural deposits; industrial wastes     |
|   |                 |            | Average           | 86                       | 7.3              | 41                |  |
| Turbidity [Units]   | 5               | N/A        | Range             | 0 - 1.2                  | N/A              | .06 - 4.8         | Soil runoff  |
|   |                 |            | Average           | 0.4                      | ND               | 0.27              |  |
| Total Dissolved Solids [ppm]  | 1,000           | N/A        | Range             | 210 - 740                | N/A              | ND                | Runoff/leaching from natural deposits                        |
|   |                 |            | Average           | 388                      | 330              | ND                |  |
| Total Filterable Residual (TDS) [ppm]   | 500-1000-1500   | N/A        | Range             | ND                       | N/A              | 220 - 380         | Runoff/leaching from natural deposits                        |
|   |                 |            | Average           | ND                       | ND               | 290               |  |

## COMMON CONTAMINANTS

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.

- 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.
- Pesticides and herbicides - may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.

- Organic chemical contaminants - including synthetic and volatile organic chemicals that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, agricultural application, and septic systems.
- Radioactive contaminants - can be naturally occurring or be the result of oil and gas production and mining activities.
- In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (U.S. EPA) and the California Department of Public Health (CDPH) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. CHPH regulations also establish limits for contaminants in bottled water that provide the same protection for public health.



Abbreviations:

mS/cm = microsiemens

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TON = Threshold Odor Number

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UCMR = Unregulated Contaminant Monitoring Rules

Umho/cm = micromhos per centimeter

| Parameters<br>[units]   | State<br>MCL<br>[DLR] | PHG<br>[MCLG] | Range<br>and<br>Average | Chino Hills Water System |                     |                      |
|---|-----------------------|---------------|-------------------------|--------------------------|---------------------|----------------------|
|   |                       |               |                         | Chino Hills<br>Wells     | Chino 1<br>Desalter | Monte Vista<br>Water |
| <b>SECONDARY STANDARDS - Aesthetic Standards - Sampled 2010-2013, No MCL Violations</b> |                       |               |                         |                          |                     |                      |
| <b>STATE REGULATED CONTAMINANTS with NO MCLs - Sampled 2010-2013</b>                    |                       |               |                         |                          |                     |                      |
| Boron<br>[ppb]  | N/A                   | NL = 1,000    | Range                   | ND                       | N/A                 | ND - 165             |
|   |                       |               | Average                 | ND                       | 140                 | 63                   |
| Chromium VI<br>[ppm]  | N/A                   | N/A           | Range                   | 2.3 - 9.1                | N/A                 | ND - 5.7             |
|   |                       |               | Average                 | 5.3                      | ND                  | 2.8                  |
| Vanadium<br>[ppb]   | N/A                   | NL = 50       | Range                   | ND                       | N/A                 | 3.8 - 8.6            |
|   |                       |               | Average                 | ND                       | ND                  | 5.5                  |
| Trichloropropane<br>(1,2,3-TCP) [ppt]   | N/A                   | NL = 5        | Range                   | ND                       | N/A                 | ND                   |
|   |                       |               | Average                 | ND                       | 18                  | ND                   |
| <b>ADDITIONAL CONTAMINANTS - Sampled 2010-2013</b>                                      |                       |               |                         |                          |                     |                      |
| Aggressive Index  | N/A                   | N/A           | Range                   | 12 - 13                  | N/A                 | ND                   |
|   |                       |               | Average                 | 12                       | ND                  | ND                   |
| Alkalinity<br>[ppm]   | N/A                   | N/A           | Range                   | 78 - 240                 | N/A                 | 75 - 210             |
|   |                       |               | Average                 | 154                      | 100                 | 105                  |
| Bicarbonate<br>[ppm]  | N/A                   | N/A           | Range                   | 95 - 290                 | N/A                 | 91 - 250             |
|   |                       |               | Average                 | 185                      | 130                 | 126                  |
| Bromoform<br>[ppb]  | [1]                   | N/A           | Range                   | 0 - 1                    | N/A                 | ND                   |
|   |                       |               | Average                 | 0.2                      | ND                  | ND                   |
| Calcium<br>[ppm]  | N/A                   | N/A           | Range                   | 7 - 160                  | N/A                 | 20 - 92              |
|   |                       |               | Average                 | 74                       | 55                  | 42                   |
| Hardness<br>[ppm]   | N/A                   | N/A           | Range                   | 19 - 520                 | N/A                 | 100 - 300            |
|   |                       |               | Average                 | 240                      | 190                 | 150                  |
| Magnesium<br>[ppm]  | N/A                   | N/A           | Range                   | 0 - 29                   | N/A                 | 3 - 20               |
|   |                       |               | Average                 | 13                       | 12                  | 11                   |
| pH<br>[Units]   | N/A                   | N/A           | Range                   | 0 - 8.6                  | N/A                 | 7.7 - 8.2            |
|   |                       |               | Average                 | 8                        | 7.2                 | 8                    |
| Potassium<br>[ppm]  | N/A                   | N/A           | Range                   | 0 - 2.7                  | N/A                 | 1.8 - 3              |
|   |                       |               | Average                 | 1.7                      | 1.3                 | 2.5                  |
| Sodium<br>[ppm]   | N/A                   | N/A           | Range                   | 18 - 61                  | N/A                 | 13 - 65              |
|   |                       |               | Average                 | 30                       | 29                  | 42                   |
| Total Silica<br>[ppm]   | N/A                   | N/A           | Range                   | ND                       | N/A                 | ND                   |
|   |                       |               | Average                 | ND                       | 12                  | ND                   |
| Total Organic Carbon (TOC) [ppm]  | [.3]                  | N/A           | Range                   | ND                       | N/A                 | 1.6 - 2.8            |
|   |                       |               | Average                 | ND                       | ND                  | 2.3                  |
| <b>UCMR3 DISTRIBUTION SAMPLES - Sampled 2010-2013</b>                                   |                       |               |                         |                          |                     |                      |
| Chlorate<br>[ppb]   | N/A                   | NL = 800      | Range                   | 31 - 76                  | N/A                 | N/A                  |
|   |                       |               | Average                 | 43                       | N/A                 | N/A                  |
| Chromium 6<br>[ppb]   | N/A                   | N/A           | Range                   | .55 - 6.6                | N/A                 | N/A                  |
|   |                       |               | Average                 | 2.4                      | N/A                 | N/A                  |
| Molybdenum<br>[ppb]   | N/A                   | N/A           | Range                   | ND - 2.6                 | N/A                 | N/A                  |
|   |                       |               | Average                 | 1.6                      | N/A                 | N/A                  |
| Strontium<br>[ppb]  | N/A                   | N/A           | Range                   | ND - 450                 | N/A                 | N/A                  |
|   |                       |               | Average                 | 303                      | N/A                 | N/A                  |
| Total Chromium<br>[ppb]   | 50                    | [100]         | Range                   | ND - 5.4                 | N/A                 | N/A                  |
|   |                       |               | Average                 | 2                        | N/A                 | N/A                  |
| Vanadium<br>[ppb]   | N/A                   | NL = 50       | Range                   | ND - 8.5                 | N/A                 | N/A                  |
|   |                       |               | Average                 | 4.5                      | N/A                 | N/A                  |
| 1,2,3-Trichloropropane<br>[ppb]   | N/A                   | NL = 5        | Range                   | ND - .048                | N/A                 | N/A                  |
|   |                       |               | Average                 | 0.01                     | N/A                 | N/A                  |

# WATER QUALITY TERMS

**Blending:** The mixing of high-quality water with lower quality water to a calculated ratio to meet or exceed approved standards before delivery to customers.

**Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the Primary Health Goal (PHG) or the Maximum Contaminant Level Goal [MCLG] 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. EPA.

**Maximum Residual Disinfectant Level (MRDL):** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary for control of microbial contaminants.

**Maximum Residual Disinfectant Level Goal (MRDLG):** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

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

**Public Health Goal (PHG):** The level of a contaminant in drinking water below which there is no known or expected health risk. PHGs are set by the California Environment Protection Agency.

**Regulatory Action Level (AL):** The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements that a water system must follow.

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

**Turbidity:** A measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

**Units:** A unit of measurement is a definite magnitude of a physical quantity, defined and adopted by convention and/or by law, that is used as a standard for measurement of the same physical quantity.

## STAGE II MODERATE WATER CONSERVATION ALERT



The City of Chino Hills has declared a Stage II Moderate Water Conservation Alert in accordance with its Water Conservation Ordinance. Stage II is declared when it is anticipated that the water supply may be reduced by up to 10%. The California Department of Water Resources has indicated that the Metropolitan Water District (MWD), one provider of imported water deliveries to Chino Hills, will not receive any water from the State Water Project which originates from the Sacramento Delta. Water deliveries from MWD are not currently anticipated to be curtailed because the agency has made significant progress in infrastructure to store water.

The Stage II Water Alert does not apply to construction projects or areas where recycled water, flowing through purple pipes, is used. Restrictions that prohibit watering landscaped areas between 9:00 a.m. and 6:00 p.m. (except where purple pipes deliver recycled water to landscaped areas) and the hosing down of driveways are among the list of eight items designed to eliminate water waste.

Provisions and Restrictions of the Stage II Water Conservation Alert: (Section 3.08.070)

- No hose washing of sidewalks, driveways, parking areas, etc.
- Decorative water fountains at commercial properties may only be operated if the water is part of a re-circulating system.
- Water customers must repair all water leaks.
- Outdoor watering of landscaping is prohibited between the hours of 9:00 a.m. and 6:00 p.m. \* \*\*
- Vehicles, trailers, boats, and livestock can be washed with the use of a bucket and a hand-held hose equipped with a shut-off nozzle for a quick rinse.
- Restaurants may not serve water unless the customer requests water.
- Water may not run off or leak from landscaped areas to streets, sidewalks, or other paved areas due to incorrectly directed or maintained sprinklers or overwatering.
- Fire hydrants may only be used for firefighting. \*\*\*

\*This provision does not apply to water dependent industries including equestrian and livestock businesses, nurseries, and golf courses.

\*\* Hand watering through the use of a hand-held hose with a shut-off nozzle is permitted.

\*\*\*An exception may be made for construction use through a City-designated meter when recycled water is not available.

If residents observe prohibited activities, they may call the City's Water Wise Hotline at (909) 364-2850 to report the concern. The City's Water Conservation staff will follow-up and provide information about the requirements of the Stage II Water Alert. Public Works employees who work out in the field will make note of locations where water waste is observed for follow-up as well. Water customers with questions about the Stage II Water Alert may call (909) 364-2804.

# DRINKING WATER AND YOUR 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 U.S. EPA's Safe Drinking Water Hotline 1-800-426-4791.

**LEAD** – 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. The City 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 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 can take to minimize exposure is available from the Safe Drinking Water Hotline or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

The U.S. EPA promulgated National Primary Drinking Water Regulations for Lead and Copper on June 7, 1991. Three monitoring protocols are included in the final rule: (1) Water Monitoring for Lead and Copper;

(2) Water Quality Parameter Monitoring; (3) Source Water Monitoring for Lead and Copper. Monitoring tap water for lead and copper determines the lead and copper concentrations in drinking water. In 2012, the City took its latest round of sampling as required by the U.S. EPA. The established action level for lead is 0.15 mg/L. Sample results for the 90th percentile was .0 mg/L. The established action level for copper is 1.3 mg/L. The 90th percentile for copper was .40 mg/L. Of 30 sites sampled, none exceeded the established action level.

**NITRATE** – In drinking water at levels above 45 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, or you are pregnant, you should ask advice from your health care provider. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity.

**PERCHLORATE** – Has been shown to interfere with uptake of iodide by the thyroid gland, and thereby can reduce the production of thyroid hormones, leading to adverse effects associated with inadequate hormone levels.

Thyroid hormones are needed for normal prenatal growth and development of the fetus, as well as for normal growth and development in the infant and child. In adults, thyroid hormones are needed for normal metabolism and mental function.

Perchlorate is an inorganic chemical used in solid rocket propellant, fireworks, explosives, flares, matches, and a variety of industries. It usually gets into drinking water as a result of environmental contamination from historic aerospace or other industrial operations that used, or use, store, or dispose of perchlorate and its salts.

**ARSENIC** – While your drinking water meets the federal and state standard for arsenic, it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. U.S. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Arsenic found in City wells is caused by erosion of natural deposits in the deep aquifers. Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.

## CITY OF CHINO HILLS ASSESSMENT OF SOURCE WATER

The California Department of Public Health (CDPH) conducted a source water assessment of all operable City water wells in May 2002. The assessment was designed to make the public and the City aware of contaminants detected in the City's groundwater supply. In addition, the assessment highlights possible sources of these and future contaminants. The focus of the program was information gathering with attention to activities that may affect drinking water quality. The program enables public water systems to better protect and manage surface and groundwater resources. A copy of the complete assessment is available at CDPH's San Bernardino District Office at 464 West 4th Street, Suite 437, San Bernardino, California, 92401. You may request a summary of the assessment by contacting CDPH at (909) 383-4320.

The active sources are considered most vulnerable to the following activities associated with contaminants detected in the water supply: known contaminant plumes, agricultural drainage, furniture repair/manufacturing, electrical/electronic manufacturing, sewer collection systems, appliance/electronic repair, chemical/petroleum processing/storage, and metal plating/finishing/fabricating. The sources are considered most vulnerable to the following activities not associated with any detected contaminants: fleet/truck/bus terminals, furniture repair/manufacturing, railroad yards/maintenance/fueling areas, chemical/petroleum processing/storage, and airport maintenance/fueling areas. As all potable water in existence continues to recycle for our use, pure quality does not exist; all water contains chemicals, organic and inorganic. While this lists chemicals detected in City-owned well water, no chemicals at or above allowable limits enter the water distribution system or reach our customers. Water from the wells is treated by trained and certified City staff using approved treatment processes and approved blending plans.

The City of Chino Hills publishes this Water Quality Consumer Confidence Report annually. A copy of this report can also be found on the City's website at [www.chinohills.org/ccr](http://www.chinohills.org/ccr). For additional information, or to get answers to questions you may have about your water, call the City of Chino Hills Water Quality Technician at (909) 364-2808.

### PUBLIC MEETING SCHEDULE

The City of Chino Hills City Council meets on the second and fourth Tuesday of each month at 7:00 p.m. in the Council Chambers, 14000 City Center Drive, Chino Hills, unless otherwise noted. All meetings are open to the public and agendas are posted prior to the meeting at City Hall or online at [www.chinohills.org/agendas](http://www.chinohills.org/agendas).