

WATER QUALITY MONITORING

The City of Chino safeguards its water supply by exceeding the monitoring frequency required by the USEPA and CDPH. The City of Chino's drinking water sources (local wells and imported water) are monitored for contaminants such as organic compounds, inorganic compounds, microorganisms, radionuclides, and aesthetic-related contaminants. The City of Chino's water distribution system is also monitored at various locations to ensure good water quality throughout the system.

In 2013, the City's water supply was tested for more than two-hundred contaminants at state-certified laboratories. The CDPH allows certain supply sources and contaminants to be monitored less than once per year because the concentrations of these contaminants do not change frequently. Accordingly, some of the data in this report was obtained prior to 2013. Although the City's water supply was tested for more than two-hundred contaminants, regulations require the report to describe only the contaminants that were detected. The water quality data is typically reported in parts per billion (ppb), which is the equivalent of micrograms per liter (µg/l), or otherwise as listed under the units sub-heading.

COMMENTS OR QUESTIONS

If you have questions regarding the quality of your water or the information contained in this report, please contact Gilbert Aldaco, the City's Water Utilities Supervisor, at (909) 334-3425, 7:00 AM to 3:00 PM, Monday through Thursday. Written inquiries may be sent to: City of Chino, Public Works - Water Section, P.O. Box 667, Chino, CA 91708, Attention: Gilbert Aldaco

The public is encouraged to participate in discussions concerning the City's drinking water. Meetings of the Chino City Council are typically scheduled on the first and third Tuesday of each month beginning at 7:00 p.m. at City Hall, 13220 Central Avenue in Chino, California.

Please share this information with all other people who drink this water, especially those who may not have received this report directly. If you are a landlord or manage a multi-unit dwelling, please contact us at (909) 334-3427 to request additional copies of this report to ensure your tenants receive this important information.

Report your observations of prohibited water use by calling 909-334-3427 or by completing an online report on the City's website: <http://cityofchino.org/government-services/public-works/report-prohibited-water-usage>



City of Chino

Public Works Department
P.O. Box 667
Chino, CA 91708-0667

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER QUALITY

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo ó hable con alguien que lo entienda bien. También puede llamar al número de teléfono (909) 334-3425 de Lunes a Jueves.



City of Chino

2013 Consumer Confidence Report

The City of Chino is pleased to provide you with this Annual Water Quality Report, also known as the Consumer Confidence Report.

In accordance with State requirements, this report is intended to provide you, the consumer, with information regarding the quality of drinking water the City of Chino provided in 2013. In this report you will find important information on our water sources and water conservation. This report can also be found on the City's website: <http://cityofchino.org/businesses/green-chino/water-quality-report>. The title of these annual reports has been adjusted to match the year in which the City provided your drinking water supply.

WATER QUALITY REGULATIONS

The Federal Safe Drinking Water Act requires the United States Environmental Protection Agency (USEPA) to safeguard drinking water by establishing standards that limit the amount of contaminants in drinking water. In California, the California Department of Public Health (CDPH) also safeguards drinking water by establishing standards that are at least as stringent as the USEPA standards. Definitions of the various State and Federal standards are found within this report. In 2013, drinking water supplied by the City of Chino met all State and Federal drinking water health standards.

IMPORTANT HEALTH INFORMATION

Some people may be more sensitive to contaminants in drinking water than the general population. Immuno-compromised persons, such as persons with cancer who are undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly persons, and infants, can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The USEPA and the Center for Disease Control (CDC) guidelines describing appropriate means to lessen the risk of infection caused by microbial contaminants are available from the Safe Drinking Water Hotline: 1-800-426-4791, or at the following USEPA website: <http://www.epa.gov/safewater/>

CONTAMINANTS THAT MAY BE PRESENT IN SOURCE WATER

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 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 result from urban stormwater 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 stormwater 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 stormwater 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.

In order to ensure that tap water is safe to drink, the USEPA and the CDPH prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Independent of the USEPA and CDPH, the U.S. Food and Drug Administration (FDA) regulates bottled water with established limits for contaminants under the Federal Food, Drug, and Cosmetic Act.

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. Chino's source waters are blended or treated to yield a combined product that must comply with State and Federal standards.

LEAD

Lead in drinking water is primarily from materials and components associated with old pipelines and home plumbing. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. The City of Chino is responsible for providing high quality drinking water, but cannot control the variety of existing materials used in your household plumbing components. If you are concerned about lead in your water, you may wish to have your water tested. You can also minimize the potential for lead exposure from plumbing components by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline: 1-800-426-4791, or at <http://www.epa.gov/safewater/lead>.

WATER CONSERVATION

The year 2013 was the driest year ever recorded in California history. In response to these severe drought conditions, Governor Edmund G. Brown Jr. issued an executive order

on January 17th, 2014 to strengthen the state's ability to manage water and habitat effectively in drought conditions and called on all Californians to redouble their efforts to conserve water. Recognizing the importance of conserving water during this drought, all California residents should refrain from wasting water by;

- ✓ Avoiding the use of water to clean sidewalks, driveways, parking lots and other hardscapes
- ✓ Take short showers - a 5 minute shower uses 4-5 gallons of water compared to 50 gallons for a bath
- ✓ Shut off water while brushing your teeth, washing your hair and shaving and save up to 500 gallons a month
- ✓ Use a water-efficient shower head. They are inexpensive, easy to install, and can save you up to 750 gallons a month

SOURCE WATER SUPPLY

The City of Chino's drinking water supply is a blend of surface water (rivers, lakes, streams) and groundwater (wells). Surface water is imported from Northern California by the Metropolitan Water District (MWD) of Southern California via the State Water Project aqueduct, and is treated at the Agua de Lejos Water Treatment Plant located in Upland. Groundwater supplies are extracted via local wells operated by the City of Chino or by the Chino Basin Desalter Authority (CDA). In 2013, treated groundwater represented approximately 72% of your drinking water supply, while the remaining 28% was produced by the Agua de Lejos Water Treatment Plant.

Much like other water agencies, the City of Chino treats its various sources of water to comply with State and Federal standards. All treatment activity is approved by the California Department of Public Health (CDPH).

Source water assessments were conducted in 2001 and 2007 to determine the contamination vulnerabilities of the City of Chino's active wells. The sources are considered most vulnerable to the following activities associated with contaminants detected in the water supply: Fertilizer/Pesticide/Herbicide application, high density housing, grazing, irrigation of crops, schools, water supply wells, agricultural/irrigation wells, concentrated animal feeding operations, parks, lagoons/liquid wastes, agricultural drainage, septic systems and automobile repair shops. You may request a summary of the assessments by contacting the CDPH sanitary engineer at (909) 383-5289.

2013 Drinking Water Quality

GROUNDWATER (CITY WELLS) GROUNDWATER (CDA) SURFACE WATER (IMPORTED)

WATER QUALITY STANDARDS AND DEFINITIONS

Contaminant	Units	Year Tested	MCL {NL} <TT>	MCLG (PHG)	Range	Average	Range	Average	Range	Average	MCL Violation	Possible Sources of Contaminant
Primary Standards												
Clarity												
Turbidity	NTU	2012-2013	0.3	NA	0.069-1.2	0.251	ND	ND	0.21	0.21	No	Soil run-off
Radionuclides												
Gross Alpha	pCi/l	2012-2013	15	0	0-8.1	2.4	ND	ND	ND	ND	No	Erosion of natural deposits
Gross Beta	pCi/l	2013	50	0	NA	NA	NA	NA	ND-4	ND	No	Decay of natural and man made deposits
Radium 228	pCi/l	2012-2013	5	(0.019)	0.65-0.954	0.783	NA	NA	ND	ND	No	Erosion of natural deposits
Uranium	pCi/l	2012-2013	20	(0.43)	0.74-5.50	1.82	NA	NA	ND-1	1	No	Erosion of natural deposits
Inorganic												
Aluminum	ppm	2012-2013	1	(0.6)	ND	ND	ND	ND	0.068-0.300	0.131	No	Erosion of natural deposits; residue from some surface water treatment processes
Arsenic	ppb	2012-2013	10	(0.004)	0-2.5	0.9	ND	ND	ND-2.2	0.5	No	Erosion of natural deposits; runoff from orchards, glass and electronics manufacturing
Chromium	ppb	2012-2013	50	100	ND-13	2	ND	ND	ND	ND	No	Erosion of natural deposits; discharge from steel or pulp mills
Flouride	ppm	2012-2013	2	(1)	0.17-0.24	0.22	0.2(c)	0.2	ND	ND	No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (as NO3)	ppm	2013	45	45	0.6-39	14.5(b)	14(c)	14	ND-3.99	1.77	No	Run-off and leaching from fertilizer use; leaching from septic tank and sewage; erosion of natural deposits
Perchlorate	ppb	2012-2013	6	(6)(g)	0-4.8	2.9(e)	ND	ND	NA	NA	No	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;
Chromium VI (Hexavalent Chromium)	ppb	2012-2013	NA(f)	NA	6.00-14.00	7.90	ND	ND	ND	ND	NA	Industrial discharges
Synthetic Organic												
Dibromochloropropane(DBCP)	ppt	2012-2013	200	(1.7)	ND-0.086	0.02	ND	ND	ND	ND	No	Banned nematocide that may still be present in soils due to run-off/leaching from former use on soybeans, cotton, vineyards, tomatoes, and tree fruit
Picloram	ppb	2012-2013	500	500	ND-2.10	0.92	NA	NA	NA	NA	No	Herbicide runoff
Secondary Standards												
Aesthetic												
Aluminum	ppb	2012-2013	200	NA	ND	ND	ND	ND	68-300	131	No	Erosion of natural deposits; residual from some surface treatment processes
Foaming Agents(MBAS)	ppb	2012-2013	500	NA	ND-0.1	0.01	0.05(c)	0.05	NA	NA	No	Municipal and industrial waste discharges
Odor-Threshold	TON	2012-2013	3	NA	ND-2	1	ND	ND	2-3	2	No	Naturally-occurring organic materials
Turbidity	NTU	2012-2013	5	NA	0.069-1.2	0.251	ND	ND	0.07-0.39	0.2	No	Soil run-off
Total Dissolved Solids	ppm	2012-2013	1000	NA	260.0-900.0	427.1	330(c)	330	270-320	298	No	Run-off/leaching from natural deposits
Specific Conductance	µS/cm	2012-2013	1600	NA	400.0-1200.0	620.0	550(c)	550	530-550	540	No	Substances that form ions when in water
Copper	ppb	2012-2013	1	NA	0.00-0.003	0.0008	ND	ND	ND	ND	No	Internal corrosion of household plumbing; erosion of natural deposits; leaching from wood preservatives
Zinc	ppm	2012-2013	5	NA	ND-0.00	0.00	ND	ND	NA	NA	No	Run-off from natural deposits and industrial discharge
Chloride	ppm	2012-2013	500	NA	9.8-82.0	24.1	82(c)	82	55-97	79	No	Run-off/leaching from natural deposits; seawater influence
Sulfate	ppm	2012-2013	500	NA	15-59.0	33.1	7.3(c)	7.3	35-62	48	No	Run-off/leaching from natural deposits; industrial wastes
Other Monitored Parameters												
1,2,3-Trichloropropane	ppt	2012-2013	{5}	(0.7)	6.6-79(d)	47	18(c)	18	ND	ND	NA	Industrial discharges; soil fumigation
Boron	ppm	2012-2013	{1}	NA	0-0.00006	0.000009	0.140(c)	0.14	0.130-0.210	0.165	NA	Run-off /leaching from natural deposits; industrial wastes
Vanadium	ppb	2012-2013	{50}	NA	4.1-6.6	5.0	NA	NA	3.7-4.5	4.1	NA	Naturally-occurring; industrial waste discharges
Alkalinity	ppm	2012-2013	NA	NA	130.0-220.0	152.9	100(c)	100	67-83	75	NA	Naturally-occurring
Bicarbonate	ppm	2012-2013	NA	NA	160.0-270.0	187.1	130(c)	130	81-100	91	NA	Naturally-occurring
Calcium	ppm	2012-2013	NA	NA	46.0-150.0	76.6	55(c)	55	20-28	24	NA	Naturally-occurring
Magnesium	ppm	2012-2013	NA	NA	9.6-37.0	17.5	12(c)	12	12-14	13	NA	Naturally-occurring
pH	Units	2012-2013	NA	NA	7.3-8.3	7.6	7.2(c)	7.2	7.94-8.57	8.24	NA	NA
Potassium	ppm	2012-2013	NA	NA	2.0-3.5	2.3	1.3(c)	1.3	2.8-3.2	3	NA	Naturally-occurring
Sodium	ppm	2012-2013	NA	NA	14.0-38.0	21	29(c)	29	61-72	65	NA	Run-off from natural deposits; seawater influence
Total Hardness (CaCO3)	ppm	2012-2013	NA	NA	150.0-540.0	264.3	190(c)	190	100-120	113	NA	Leaching from natural deposits
Total Organic Carbon	ppm	2012-2013	<TT>	NA	NA	NA	ND	ND	1.6-2.8	2.3	NA	Various natural and man made sources.
Distribution System Monitoring												
Microbial	Units	Year Tested	MCL [MRDL]	PHG [MRDLG]	Range	Average	Range	Average	Range	Average	MCL Violation	Possible Sources of Contaminant
Total Coliform Bacteria	%	2013	(a)	(0)	0-2.83 (a)	2.83	NA	NA	ND	ND	No	Naturally present in the environment
Disinfection Byproducts and Residuals					Range				Average		MCL Violation	
TTHMs(Total Trihalomethane)	ppb	2013	80	NA	3-66				48		No	By-product of drinking water chlorination
Halo acetic acid (HAA5)	ppb	2013	60	NA	ND-13				5		No	By-product of drinking water disinfection
Chlorine	ppm	2013	[4 as CL2]	[4 as CL2]	0.10-1.34				0.55		No	Drinking water disinfectant added for treatment
Copper & Lead			AL	(PHG)	90% Percentile Value		Number of Sites		Sites Exceeding AL		AL Violation	Possible Sources of Contaminant
Copper	ppb	2011	1300	(300)	300		66		0		No	Internal corrosion of household plumbing
Lead	ppb	2011	15	(0.2)	3.1		66		1		No	Internal corrosion of household plumbing

Maximum Contaminant Level (MCL): The maximum amount of a substance that is allowed in drinking water. Primary MCLs are established as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are established to protect the odor, taste, and appearance of drinking water.

Maximum Contaminant Level Goal (MCLG): The amount of a substance in drinking water below which there is no known or expected potential risk to health. MCLGs are established by the EPA.

Public Health Goal (PHG): The amount of a substance in drinking water below which there is no known or expected potential risk to health. PHGs are established by the California EPA.

Primary Drinking Water Standard: MCLs and MRDLs for contaminants that may affect health. It also includes the monitoring, reporting, and water treatment requirements for these MCLs and MRDLs.

Secondary Drinking Water Standard: MCLs for contaminants that may affect the color, taste, and aesthetic properties of water.

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

Notification Level (NL): Used to provide information to public water systems and others about certain nonregulated chemicals in drinking water that lack maximum contaminant levels (MCLs).

Maximum Residual Disinfection Level (MRDL): The maximum amount of a disinfectant allowed in drinking water. Addition of a disinfectant is required for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The amount of a disinfectant added for water treatment below which there is no known or expected potential risk to health. MRDLGs do not consider the health benefits resulting from the required application of disinfectants to control microbial contaminants.

Treatment Technique (TT): A required process intended to remove or reduce the amount of contaminants in drinking water.

NTU = Nephelometric Turbidity Unit or unit measure of clarity;

pCi/L = picocuries per liter or the measure of radioactivity;

TON = Threshold Odor Number or unit of measure for odor;

µS/cm = microsiemens per centimeter or the measure of electrical conductance;

ppm = parts per million or milligrams per liter (mg/l);

ppb = parts per billion or micrograms per liter (µg/l);

ppt = parts per trillion or nanograms per liter (ng/l);

NA = Not Applicable because monitoring is not required or there is no established standard;

ND = Not Detected in laboratory analysis

FOOTNOTES

- (a) = No more than 5% of monthly water samples shall test positive for coliform bacteria. The "average" is equal to the percentage of positive water samples for coliform bacteria.
- (b) = This report describes the range of measured nitrate concentration in blended groundwater prior to delivery to the City of Chino's distribution system. The average nitrate concentration is based on an annual average. Nitrate in drinking water at levels above 45 ppm 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 ppm 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 seek advice from your health care provider. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity.
- (c) = Single test result therefore the average is equal to the range.
- (d) = This report describes the range of measured 1,2,3-TCP concentration in the various sources of water that comprise the City of Chino water supply. Some groundwater produced by City of Chino and CDA wells contained concentrations of 1,2,3-TCP that exceeded the 0.005 ppb AL. The DPH recommends that water utilities remove a water source from service if the 1,2,3-TCP concentration is 100 times greater than the AL.
- (e) = Based on composite analysis of source production after treatment/blending and prior to delivery to the City of Chino's distribution system.
- (f) = Chromium VI (hexavalent chromium) does not currently have an established Maximum Contaminant Level (MCL). The first ever drinking water MCL for Chromium VI (hexavalent chromium) of 10 parts per billion will take effect July 1, 2014.
- (g) = The PHG for Perchlorate is currently 6 ppb but expected to decrease to 1 ppb based on a draft technical support document prepared by Cal/EPA's Office of Environmental Health Hazard Assessment (OEHA) in December 2012. At this time there has been no indication of when this change may take effect.