2020 Consumer Confidence Report

Water System Name: PATTERSON, CITY OF Report Date: June 2021

We test the drinking water quality for many constituents as required by state and federal regulations. This report shows the results of our monitoring for the period of January 1 - December 31, 2020.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo ó hable con alquien que lo entienda bien.

Type of water source(s) in use: According to SWRCB records, this Source is Groundwater. This Assessment was done using the Default Groundwater System Method.

Your water comes from 7 source(s): Well 02 - North 5th St, Well 05 - Hartley St, Well 06 - Poppy Ave, Well 07 - Hartley Ave, Well 08 - Orange Ave, Well 09 - Orange Ave and Well 11 - Sycamore Ave.

The public can participate in decisions that affect drinking water by attending City Council meetings on the 1st and 3rd Tuesday of every month at 7:00pm. Until further notice, all future meetings will be held in accordance with Executive Order N-29-20, issued by California governor Gavin Newsom on March 17, 2020, the Ralph M. Brown act (California government code section 54950, et deq.) and the Federal American with Disabilities Act. For more information about this report or any questions related to your drinking water, please call (209) 895-8060 and ask for Maria Encinas or visit our website at www.ci.patterson.ca.us.

All members of the public may participate in City Council meetings via teleconference by calling 1-669-900-9128, meeting ID: 6935384239, password: 20995363 and will be given the opportunity to provide public comment.

JOIN FROM A PC, MAC, IPAD, IPHONE, OR ANDROID DEVICE BY USING THIS URL: https://us02web.zoom.us/j/6935384239?pwd=ZmZwMFdYajRsTjlKTnNTamZCWXFXdz09

THESE MEETINGS ARE TELEVISED AND AVAILABLE FOR PUBLIC VIEWING ON COMCAST CABLE CHANNEL 7 ON THE FOLLOWING DAYS: WEDNESDAYS AT 3:00 P.M., FRIDAYS AT 8:00 P.M. AND SATURDAYS AT 12:00 P.M. OR WATCH ON INTERNET VIMEO LINK: https://vimeo.com/channels/patterson/

Tables 1, 2, 3, 4, 5, 6, 7, 8, 9 and 10 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The State Water Board allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, are more than one year old.

Table 1 – SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA

Microbiological Contaminants	Highest No. of Detections	No. of Months in Violation	MCL	MCLG	Typical sources of contaminant
Total Coliform Bacteria	1/mo. (2020)	0	No more than 1 positive monthly sample	0	Naturally present in the environment

Table 2 – SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER

Lead and Copper	Sample Date	No. of Samples	90th percentile level detected	No. Sites Exceeding AL	AL	PHG	Typical Sources of contaminant
Lead (ug/L)	(2018)	46	1.7	1	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufactures erosion of natural deposits
Copper (mg/L)	(2018)	46	0.18	0	1.3	.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

Table 3 – SAMPLING RESULTS FOR SODIUM AND HARDNESS

Constituent (Unit of Measure)	Sample Date	Average	Range	MCL	PHG (MCLG)	Typical sources of contaminant
Sodium (mg/L)	(2019 – 2020)	111	70-141	None	None	Salt present in the water is generally naturally occurring
Hardness (mg/L)	(2019 – 2020)	387	258-481	none	none	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

Table 4 – DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD

Constituent (Unit of Measure)	Sample Date	Average	Range	MCL (MRDL)	PHG(MCLG) (MRDLG)	Typical sources of contaminant
Arsenic (ug/L)	(2019 – 2020)	3	ND - 5	10	0.004	Erosion of natural deposits; runoff from orchards, glass and electronics production wastes
Chromium (ug/L)	(2019 – 2020)	20	17 - 28	50.0	n/a	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits
Hexavalent Chromium (ug/L)	(2017 – 2020)	19	14.3-26.3		0.02	Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, textile manufacturing facilities; erosion of natural deposits
Fluoride (mg/L)	(2019 – 2020)	0.1	ND – 0.4	2	1	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate as N (mg/L)	(2019 – 2020)	3.9	ND – 7.8	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Nitrate + Nitrite as N (mg/L)	(2019 – 2020)	3.1	1.4 – 7.5	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Selenium (ug/L)	(2019 – 2020)	8	5 – 11	50	30	Discharge from petroleum, glass, metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers; runoff from livestock
Gross Alpha (pCi/L)	(2012 – 2020)	3.24	ND – 5.14	15	(0)	Erosion of natural deposits
Uranium (pCi/L)	(2012 – 2020)	2.147	ND – 3.57	20	0.43	Erosion of natural deposits
Tetrachloroethylene (PCE) (ug/L)	(2018 – 2020)	1.1	ND – 3.6	5	0.06	Discharge from factories, dry cleaners, and auto shops (metal degreaser)
1,2,3,-Trichloropropane (1,2,3-TCP) (ug/L)*	(2018 – 2020)	ND	n/a	0.005	0.0007	Discharge from industrial and agricultural chemical factories; leaching from hazardous waste sites; used as cleaning and maintenance solvent, paint and varnish remover, and cleaning and degreasing agent; byproduct during the production of other compounds and pesticides

Table 5 – TREATED DECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD

Constituent (Unit of Measure)	Sample Date	Average	Range	MCL (MRDL)	PHG(MCLG) (MRDLG)	Typical sources of contaminant
Chromium (ug/L)	(2016)	24	19 – 30	50.0	n/a	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits
Hexavalent Chromium (ug/L)	(2016)	17.3	ND – 25.9	10	0.02	Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities; erosion of natural deposits.
Nitrate as N (mg/L)	(2016)	4	3.3 – 4.7	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Tetrachloroethylene(PCE) (ug/L)	(2020)	ND	n/a	5	0.06	Discharge from factories, dry cleaners, and auto shops (metal degreaser)

Table 6 – DETECTION OF CONTAMINANTS WITH A SECONDARY DIRING WATER STANDARD

Constituent (Unit of Measure)	Sample Date	Average	Range	MCL	PHG (MCLG)	Typical sources of contaminant
Chloride (mg/L)	(2019 - 2020)	135	32 – 255	500	n/a	Runoff/leaching from natural deposits; seawater influence
Iron (ug/L)	(2019 – 2020)	156	ND – 870	300	n/a	Leaching from natural deposits; Industrial wastes
Odor Threshold at 60 °C (TON)	(2019 – 2020)	ND	ND – 2	3	n/a	Naturally-occurring organic materials
Specific Conductance (umhos/cm)	(2019 – 2020)	1480	866 – 1750	1600	n/a	Substances that form ions when in water; seawater influence
Sulfate (mg/L)	(2019 – 2020)	305	210 – 416	500	n/a	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (mg/L)	(2019 – 2020)	952	530 – 1180	1000	n/a	Runoff/leaching from natural deposits
Turbidity (NTU)	(2019 – 2020)	0.5	ND – 1.4	5	n/a	Soil runoff

Table 7 – TREATED DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD

Constituent (Unit of Measure)	Sample Date	Average	Range	MCL	PHG (MCLG)	Typical sources
Total Dissolved Solids (mg/L)	(2016)	1107	1060 – 1170	1000	n/a	Runoff/leaching from natural deposits

Table 8 - DETECTION OF UNREGULATED CONTAMINANTS

Constituent (and reporting units)	Sample Date	Average	Range	Notification Level	Typical Sources of Contaminant
Boron (mg/L)	(2019 – 2020)	0.4	0.3 – 0.6	1	Boron exposures resulted in decreased fetal weight (developmental effects) in newborn rats.
Vanadium (mg/L)	(2019 – 2020)	0.008	0.005 – 0.010	0.05	Vanadium exposures resulted in developmental and reproductive effects in rats.

Table 9 – ADDITIONAL DETECTIONS

Constituent (Unit of Measure)	Sample Date	Average	Range	Notification Level	Typical sources of contaminant
Calcium (mg/L)	(2019 – 2020)	68	44 – 89	n/a	n/a
Magnesium (mg/L)	(2019 – 2020)	53	35 – 63	n/a	n/a
pH (units)	(2019 – 2020)	7.7	6.8 – 9.5	n/a	n/a
Alkalinity (mg/L)	(2019 – 2020)	153	110 – 200	n/a	n/a
Aggressiveness Index	(2019 – 2020)	12.1	11.3 – 13.8	n/a	n/a
Langelier Index	(2019 – 2020)	0.2	-0.6 – 1.9	n/a	n/a

Table 10 – DETECTION OF DISINFECTANT/DISINFECTANT BYPRODUCT RULE

Constituent (Unit of Measure)	Sample Date	Average	Range	MCL (MRDL)	PHG (MCLG)	Violation	Typical sources of contaminant
Total Trihalomethanes (TTHMs) (ug/L)	(2020)	16	ND – 19	80	n/a	No	By-product of drinking water disinfectant added for treatment
Chloride (mg/L)	(2020)	0.00	n/a	4.0	4.0	No	Drinking water disinfectant added for treatment
Haloacetic Acids (5) (ug/L)	(2020)	1.8	ND – 4	60	n/a	No	By-product of drinking water disinfection

Any violation of MCL, AL or MRDL is highlighted.

Lead Specific Language for Community Water Systems: 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 the service lines and home plumbing.

City of Patterson Drinking Water 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 for 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 http://www.epa.gov/lead.

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 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 if 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 tapwater is safe to drink, the USEPA and the State Water Resource Control Board (State Water Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. State Water Board regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

TERMS USED IN THIS REPORT

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

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that 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 Standards (PDWS): MCLs and MRDLs for the contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Secondary Drinking Water Standards (SDWS): MCLs for the contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.

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

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

Level 1 Assessment: Study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment: Detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

ND: not detectable at testing limit

mg/L: milligrams per liter or parts per million (ppm) ug/L: micrograms per liter or parts per billion (ppb) pCi/L: picocuries per liter (a measure of radiation)

NTU: Nephelometric Turbidity Units

umhos/cm: micro mhos per centimeter

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. 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 *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426- 4791).