CITY OF MORGAN HILL

WATER CONNECTION

JULY 2016

Take this ad and go look at your lawn.

If it is lush and green are you:

a. Wearing green sunglasses
b. Painting your lawn green
c. Replacing your lawn with artificial turf
d. Watering way too much during the drought

CITY OF MORGAN HILL

408-776-7333
mhdrought.com

Morgan Hill residents are REQUIRED to help

Conserve water as follows:
Limit landscape watering to two days a week

- Monday and Thursday for **ODD** numbered addresses
- Tuesday and Friday for **EVEN** numbered addresses
- No watering on Wednesdays and Weekends
- Water for 15 minutes or less per zone

2016 Report to Consumers on

WATER QUALITY Consumer Confidence Report

Our Goal: Meet or Exceed Federal & State Regulations

The City of Morgan Hill is committed to providing the community a safe, reliable supply of excellent quality drinking water that meets or exceeds Federal and State regulations. Again in 2016, we met or exceeded every water quality standard without a single violation.

This report gives information about the quality of water provided in 2016. It describes where your water comes from, what it contains and how it compares to State standards.

Share This Report

Landlords, businesses, schools, hospitals and other groups are encouraged to share this important water quality information with water users at their locations who are not billed customers of the City of Morgan Hill and therefore do not receive this report directly.

This report contains important information about your drinking water. Translate it, or speak with someone who understands it.

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

A Word About Chemicals and Organisms

Here is a brief description of chemicals and organisms, and how the City of Morgan Hill monitors, tests, and treats for them:

Lead and Copper Testing

In 1991, the United States Environmental Protection Agency (USEPA) adopted the Lead and Copper Rule which requires all cities, including Morgan Hill, to perform lead and copper testing. The City's public water system does not have detectable levels of lead and copper; however, these metals may leach into the water from home plumbing.

The City is on a three-year cycle for testing of lead and copper determined by the primary testing performed at the inception of the Lead and Copper Rule.

The City last completed its tri-annual round of sampling in 2015 and the sample results remain under Federal Action Levels for both lead and copper. We will retest these levels again in 2018.

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. 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 **http://water.epa.gov/drink/info/lead**

Nitrates as N

Nitrate in drinking water at levels above 10 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 serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 10 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with specific enzyme deficiencies. If you are caring for an infant, or if you are pregnant, you should ask advice from your health care provider.

The City's water supply is below the maximum contaminant level (MCL) for nitrates. In 2016, the City performed 33 nitrate analyses alone to ensure a safe water supply.

Unregulated Contaminants

The City monitors for unregulated contaminants as required by USEPA. This helps the USEPA and SWRCB determine where certain contaminants occur, and whether the contaminants need to be regulated.

Water Sources

Morgan Hill is located in South Santa Clara County, situated within the Coyote and Llagas underground aquifers. These aquifers are the source of Morgan Hill's water supply.

The City currently operates 13 groundwater wells throughout the City. In 2016, these wells supplied 2,046 million gallons of water to approximately 13,620 active water connections. The water produced by these wells is disinfected with sodium hypochlorite to protect against microbial contaminants.

An assessment of the drinking water sources for the City of Morgan Hill was completed in September 1998. The assessment concluded that the groundwater source to be most vulnerable to the following activities associated with contaminants detected in groundwater: low density septic systems, irrigated crops, grazing and animal operations, agricultural/irrigation wells and animal feeding operations (occurrence of nitrate in groundwater).

A copy of the complete assessment is available at the State Water Resource Control Board, Drinking Water Field Operations Branch at 850 Marina Bay Parkway, Bldg. P, 2nd Floor, Room 458, Richmond, California, and the City of Morgan Hill Utilities Division at 100 Edes Court.

Water Quality Data

The table on pages 6-7 of this report lists all the SWRCB-regulated drinking water contaminants detected during the test cycle up to December 31, 2016.

To ensure that tap water is safe to drink, SWRCB prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Morgan Hill's water is treated in accordance with SWRCB regulations.

The SWRCB Food and Drug Branch regulations establish limits for contaminants in bottled water; these limits provide the same protection for the public water supply. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk.

Unless otherwise noted, the data presented in this table is from testing done over the period January 1 - December 31, 2016. The State allows the City to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Thus, some of the data – though representative of the water quality – is more than a year old.

Water Sampling and Testing

The water sampling required by SWRCB consists of weekly Bacteria (520), Quarterly Nitrate (8), Quarterly Trihalomethanes (16), Quarterly Haloacetic Acids (16), Annual Nitrate (25), Triannual Inorganic Chemicals (184), Triannual Radiological (4), Triannual Synthetic Organic Chemicals (395), Triannual Volatile Organic Chemicals (196), Triannual General Physical (175), for a total of 1,535 required samples from 30 separate sample stations and the 15 active source wells located throughout the City's water production and distribution system.

Water Quality Statement

For the calendar year 2016, your tap water met all U.S. Environmental Protection Agency (USEPA) and State drinking water health standards. The City of Morgan Hill vigilantly safeguards your water supply, and once again we are proud to report that the City's system is in full compliance with all State Water Resource Control Board.

Other Information

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 USEPA's Safe Drinking Water Hotline (800) 426-4791. Or find it on USEPA's website: **http://www.epa.gov/dwstandardsregulations/drinking-water-standards-and-health-advisory-tables**
California notification levels are available on the State Board's website: **http://www.swrcb.ca.gov/drinking_water/certlic/drinkingwater/NotificationLevels.shtml**

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 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.

Water System Improvements

The City's water system consists of 13 production wells, 182 miles of water main, nine pumping stations, and 12 reservoirs. This complex, interrelated system requires 24-hour monitoring and an extensive program of ongoing maintenance. Additionally, a five-year program of capital improvements must be constantly updated to plan and fund new capacity and the replacement of aging infrastructure. During the past year, the following water system improvements were completed:

New Water Main:
4000 Feet of 16" Water Main

New Well Drilling:
BoysRanch 2A Well, and Jackson Well #3

TERMS & ABBREVIATIONS USED IN THE DATA TABLES

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 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.

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

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.

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

n/a: not applicable

ns: no standard

nd: not detectable at testing limit

cu: color unit (a measure of color in water)

ppb: parts per billion or micrograms per liter

ug/L: micrograms per liter

ppm: parts per million or milligrams per liter

mg/L: milligrams per liter

pCi/l: picocuries per liter (a measure of radiation)

MFL: Million Fibers per Liter, with a fiber length greater than 10 micrometers

grains per gallon: the measure of the concentration of a solution

TON: Threshold Odor Number (a measure of the odor associated with water)

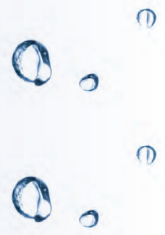
umhos/cm: the measure of the dissolved inorganic salt content

<: less than

DLR: Detection limit for purposes of reporting.

Contaminants that may be present in source water before we treat it.

- **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- **Inorganic contaminants**, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, and mining or farming.
- **Pesticides and herbicides**, which may come from a variety of sources such as agricultural and residential uses.
- **Radioactive contaminants**, which are naturally occurring.
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum distillation, and can also come from gas stations, urban runoff and septic systems.



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MICROBIOLOGICAL CONTAMINENTS

MICROBIOLOGICAL CONTAMINENT	HIGHEST MONTHLY % OF POSITIVE SAMPLES	NO.OF MONTHS IN VIOLATION	MCL	MCLG	TYPICAL SOURCE OF CONTAMINATION	ACTION LEVEL EXCEEDED?
TOTAL COLIFORM BACTERIA (01/01/2016 Thru 03/31/2016)	0.0%	0	MORE THAN 5.0% OF MONTHLY SAMPLES ARE POSITIVE	0	NATURALLY PRESENT IN THE ENVIRONMENT	NO
FECAL COLIFORM BACTERIA (STATE TOTAL COLIFORM RULE) (01/01/2016 THRU 03/31/2016)	0.0%	0	A ROUTINE SAMPLE AND A REPEAT SAMPLE ARE TOTAL COLIFORM POSITIVE, AND ONE OF THOSE IS ALSO FECAL COLIFORM OR E.COLI POSITIVE.	0	HUMAN AND ANIMAL FECAL WASTE	NO
E. COLI (FEDERAL REVISED TOTAL COLIFROM RULE) (4/1/2016 THRU 12/31/2016)	0.0%	0	ROUTINE AND REPEAT SAMPLES ARE TOTAL COLIFORM - POSITIVE AND EITHER IS E.COLI-POSITIVE OR SYSTEM FAILS TO TAKE REPEAT SAMPLES FOLLOWING E. COLI POSITIVE ROUTINE SAMPLE OR SYSTEM FAILS TO ANALIZE TOTAL COLIFORM-POSITVE REPEAT SAMPLE FOR E. COLI	0	HUMAN AND ANIMAL FECAL WASTE	NO

LEAD AND COPPER RULE

PARAMETER	DATE TESTED	UNITS	ACTION LEVEL	PHG (MCLG)	NUMBER OF SITES SAMPLED	HOUSEHOLD RESULTS 90th PERCENTILE	TYPICAL SOURCE OF CONTAMINATION	ACTION LEVEL EXCEEDED?
LEAD	Sep 2015	ppb	15	0.2	30	0	INTERNAL CORROSION OF HOUSEHOLD PLUMBING SYSTEMS; EROSION OF NATURAL DEPOSITS; LEACHING FROM WOOD PRESERVATIVES	NO
COPPER	Sep 2015	ppm	1.3	0.3	30	0.3	INTERNAL CORROSION OF HOUSEHOLD PLUMBING SYSTEMS; EROSION OF NATURAL DEPOSITS; LEACHING FROM WOOD PRESERVATIVES	NO

SAMPLING RESULTS FOR SODIUM AND HARDNESS

PARAMETER	DATE TESTED	UNITS	MCL	PHG (MCLG) [MRDLG]	GROUNDWATER RANGE OF DETECTION			TYPICAL SOURCE OF CONTAMINANT	EXCEEDED MCL?
					LOW	HIGH	AVG.		
SODIUM	2016	ppm	NS	N/A	19	38	27	"SODIUM" REFERS TO THE SALT PRESENT IN THE WATER AND IS GENERALLY NATURALLY-OCCURRING	NS
HARDNESS	2016	ppm	NS		188	290	240	RUNOFF/LEACHING FROM NATURAL DEPOSITS	NS
HARDNESS	2016	GRAINS/GAL	NS		11	17	14	RUNOFF/LEACHING FROM NATURAL DEPOSITS	NS

PRIMARY DRINKING WATER STANDARDS - MANDATORY HEALTH RELATED STANDARDS

PARAMETER	DATE TESTED	UNITS	DLR	MCL	PHG (MCLG) [MRDLG]	GROUNDWATER RANGE OF DETECTION			TYPICAL SOURCE OF CONTAMINANT	EXCEEDED MCL?
						LOW	HIGH	AVG.		
INORGANIC CHEMICALS										
ALUMINUM	2016	ug/L	50	1000	600	0	51	4.64	EROSION OF NATURAL DEPOSITS; RESIDUE FROM SOME SURFACE WATER TREATMENT PROCESSES	NO
BARIUM	2016	ppm	0.1	1	2	0.00	0.05	0.05	DISCHARGES OF OIL DRILLING WASTES AND FROM METAL REFINERIES; EROSION OF NATURAL DEPOSITS	NO
FLUORIDE (NATURALLY OCCURING)	2016	ppm	0.1	2	1	0	0.16	0.13	EROSION OF NATURAL DEPOSITS; WATER ADDITIVE THAT PROMOTES STRONG TEETH; DISCHARGE FROM FERTILIZER AND ALUMINUM FACTORIES	NO
NITRATE (AS N)	2016	ppm	2	45	45	0	7.4	4.0	RUNOFF AND LEACHING FROM FERTILIZER USE; LEACHING FROM SEPTIC TANKS AND SEWAGE; EROSION OF NATURAL DEPOSITS	NO
HEXAVALENT CHROMIUM	2016	ppb	1	10	0.02	1	2.7	1.9	DISCHARGE FROM ELECTROPLATING FACTORIES, LEATHER TANNERIES, WOOD PRESERVATION, CHEMICAL SYNTHESIS, REFRACTORY PRODUCTION, AND TEXTILE MANUFACTURING FACILITIES; EROSION OF NATURAL DEPOSITS	NO
IRON	2016	ppb	100	300		0	120	10.0	LEACHING FROM NATURAL DEPOSITS; INDUSTIAL WASTES	NO
NITRATE + NITRITE (AS N)	2016	ppb		10	10	0	6.5	3.58	RUNOFF AND LEACHING FROM FERTILIZER USE; LEACHING FROM SEPTIC TANKS AND SEWAGE; EROSION OF NATURAL DEPOSITS	NO

DISINFECTANT BYPRODUCTS, DISINFECTANT RESIDUALS, AND DISINFECTION BYPRODUCT PECURSORS

PARAMETER	DATE TESTED	UNITS	MCL	PHG (MCLG) [MRDL]	GROUNDWATER RANGE OF DETECTION			TYPICAL SOURCE OF CONTAMINANT	EXCEEDED MCL?
					LOW	HIGH	AVG.		
TRIHALOMETHANES (TTHM)	2016	ppb	80	N/A	0	18.05	6.36	BY-PRODUCT OF DRINKING WATER CHLORINATION	NO
HALOACETIC ACIDS (HAA5)	2016	ppb	60	N/A	0	2.6	1.21	BY-PRODUCT OF DRINKING WATER DISINFECTION	NO
CHLORINE RESIDUAL (CL2)	2016	ppm	4.0	[4.0]	0.2	0.67	0.42	DRINKING WATER DISINFECTANT ADDED FOR TREATMENT	ND

SECONDARY DRINKING WATER STANDARDS - AESTHETICS STANDARDS

PARAMETER	DATE TESTED	UNITS	MCL	PHG (MCLG) [MRDLG]	GROUNDWATER RANGE OF DETECTION			TYPICAL SOURCE OF CONTAMINANT	EXCEEDED MCL?
					LOW	HIGH	AVG.		
CHLORIDE	2016	mg/L	500	N/A	3.4	77	54	RUNOFF/LEACHING FROM NATURAL DEPOSITS; SEAWATER INFLUENCE	NO
SULFATE	2016	mg/L	500	N/A	3.4	49	36.0	RUNOFF/LEACHING FROM NATURAL DEPOSITS; INDUSTRIAL WASTES	NO
TOTAL DISSOLVED SOLIDS	2016	mg/L	1000	N/A	340	430	376	RUNOFF/LEACHING FROM NATURAL DEPOSITS	NO
SPECIFIC CONDUCTANCE (E.C.)	2016	umho/cm	1,600	N/A	590	610	600	SUBSTANCES THAT FORM IONS WHEN IN WATER; SEA WATER INFLUENCES	NO
TURBIDITY	2016	UNITS	5	N/A	0	1.4	0	SOIL RUNOFF	NO
COLOR	2016	unit	15	N/A	0	0	0	NATURALLY-OCCURING ORGANIC MATERIALS	NO
ODOR-THRESHOLD	2016	TON	3	N/A	0	0	0	NATURALLY-OCCURING ORGANIC MATERIALS	NO
LIST OF ADDITIONAL CONSTITUENTS ANALYZED									
PH	2016	unit	NS	6.5-8.5	7.2	7.7	7.5	PH IS AN EXPRESSION OF THE INTENSITY OF THE BASIC OR ACIDIC CONDITION OF A LIQUID	NS

UNREGULATED CONTAMINATE MONITORING RULE 3

PARAMETER	DATE TESTED	UNITS	NOTIFICATION LEVEL	PHG (MCLG)	GROUNDWATER RANGE OF DETECTION			
					LOW	HIGH	AVG.	
CHLORATE	2014	ug/L	800 ug/L	NS	0	150	57.5	
CHROMIUM	2014	ug/L	N/A	NS	0.91	3.7	2.32	
HEXALVALENT CHROMIUM	2014	ug/L	N/A	NS	0.78	3.5	2.1	
MOLYBDENUM	2014	ug/L	N/A		0	1.1	0.2	
STRONTIUM	2014	ug/L	N/A		170	590	444	
VANADIUM	2014	ug/L	50ug/L		1	6.3	2.2	

City of Morgan Hill
17575 Peak Avenue
Morgan Hill, CA 95037

POSTAL CUSTOMER
MORGAN HILL, CA

Don't Be a Water Waster

- Adjust sprinklers so only your lawn is watered and not the house, sidewalk, or street.
- Run your clothes washer and dishwasher only when full. You can save up to 1,000 gallons a month.
- Monitor your water bill for unusually high use. Your bill and water meter are tools that can help you discover leaks.
- Water your lawn and garden in the morning or evening when temperatures are cooler.
- Use a broom instead of a hose to clean your driveway and sidewalk and save water every time.
- If water runs off your lawn easily, split your watering time into shorter periods for better absorption.
- Shorten your shower by a minute or two and you'll save up to 150 gallons per month.

These great ideas and more can be found at **wateruseitwisely.com/100-ways-to-conserve**