

# EAST BOULDER COUNTY WD 2020 Drinking Water Quality Report

## Covering Data For Calendar Year 2019

Public Water System ID: CO0107236

**Esta es información importante. Si no la pueden leer, necesitan que alguien se la traduzca.**

We are pleased to present to you this year's water quality report. Our constant goal is to provide you with a safe and dependable supply of drinking water. Please contact MARK JOHNS at 303-554-0031 with any questions or for public participation opportunities that may affect water quality. **Please see the water quality data from our wholesale system(s) (either attached or included in this report) for additional information about your drinking water.**

### General Information

All 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 Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791) or by visiting [epa.gov/ground-water-and-drinking-water](http://epa.gov/ground-water-and-drinking-water).

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 of infections. These people should seek advice about drinking water from their health care providers. For more information about contaminants and potential health effects, or to receive a copy of the U.S. Environmental Protection Agency (EPA) and the U.S. Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and microbiological contaminants call the EPA Safe Drinking Water Hotline at (1-800-426-4791).

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:** viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants:** salts and metals, which 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.
- Radioactive contaminants:** can be naturally occurring or be the result of oil and gas production and mining activities.
- Organic chemical contaminants:** including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and also may come from gas stations, urban storm water runoff, and septic systems.

In order to ensure that tap water is safe to drink, the Colorado Department of Public Health and Environment prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

### Lead in Drinking Water

If present, elevated levels of lead can cause serious health problems (especially for pregnant women and young children). It is possible that lead levels at your home may be higher than other homes in the community as a result of materials used in your home's plumbing. If you are concerned about lead in your water, you may wish to have your water tested. 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. Additional 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 [epa.gov/safewater/lead](http://epa.gov/safewater/lead).

### Source Water Assessment and Protection (SWAP)

The Colorado Department of Public Health and Environment may have provided us with a Source Water Assessment Report for our water supply. For general information or to obtain a copy of the report please visit [wqcdcompliance.com/ccr](http://wqcdcompliance.com/ccr). The report is located under "Guidance: Source Water Assessment Reports". Search the table using 107236, EAST BOULDER COUNTY WD, or by contacting MARK JOHNS at 303-554-0031. The Source Water Assessment Report provides a screening-level evaluation of potential contamination that *could* occur. It *does not* mean that the contamination *has or will* occur. We can use this information to evaluate the need to improve our current water treatment capabilities and prepare for future contamination threats. This can help us ensure that quality finished water is delivered to your homes. In addition, the source water assessment results provide a starting point for developing a source water protection plan. Potential sources of contamination in our source water area are listed on the next page.

Please contact us to learn more about what you can do to help protect your drinking water sources, any questions about the Drinking Water Quality Report, to learn more about our system, or to attend scheduled public meetings. We want you, our valued customers, to be informed about the services we provide and the quality water we deliver to you every day.

## Our Water Sources

<u>Sources (Water Type - Source Type)</u>	<u>Potential Source(s) of Contamination</u>
PURCHASED WATER FROM LAFAYETTE (Surface Water- Consecutive Connection)	There is no SWAP report, please contact MARK JOHNS at 303-554-0031 with questions regarding potential sources of contamination.

## Terms and Abbreviations

- **Maximum Contaminant Level (MCL)** – The highest level of a contaminant allowed in drinking water.
- **Treatment Technique (TT)** – A required process intended to reduce the level of a contaminant in drinking water.
- **Health-Based** – A violation of either a MCL or TT.
- **Non-Health-Based** – A violation that is not a MCL or TT.
- **Action Level (AL)** – The concentration of a contaminant which, if exceeded, triggers treatment and other regulatory requirements.
- **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 Contaminant Level Goal (MCLG)** – The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- **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.
- **Violation (No Abbreviation)** – Failure to meet a Colorado Primary Drinking Water Regulation.
- **Formal Enforcement Action (No Abbreviation)** – Escalated action taken by the State (due to the risk to public health, or number or severity of violations) to bring a non-compliant water system back into compliance.
- **Variance and Exemptions (V/E)** – Department permission not to meet a MCL or treatment technique under certain conditions.
- **Gross Alpha (No Abbreviation)** – Gross alpha particle activity compliance value. It includes radium-226, but excludes radon 222, and uranium.
- **Picocuries per liter (pCi/L)** – Measure of the radioactivity in water.
- **Nephelometric Turbidity Unit (NTU)** – Measure of the clarity or cloudiness of water. Turbidity in excess of 5 NTU is just noticeable to the typical person.
- **Compliance Value (No Abbreviation)** – Single or calculated value used to determine if regulatory contaminant level (e.g. MCL) is met. Examples of calculated values are the 90<sup>th</sup> Percentile, Running Annual Average (RAA) and Locational Running Annual Average (LRAA).
- **Average (x-bar)** – Typical value.
- **Range (R)** – Lowest value to the highest value.
- **Sample Size (n)** – Number or count of values (i.e. number of water samples collected).
- **Parts per million = Milligrams per liter (ppm = mg/L)** – One part per million corresponds to one minute in two years or a single penny in \$10,000.
- **Parts per billion = Micrograms per liter (ppb = ug/L)** – One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
- **Not Applicable (N/A)** – Does not apply or not available.
- **Level 1 Assessment** – A 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** – A very 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.

## Detected Contaminants

EAST BOULDER COUNTY WD routinely monitors for contaminants in your drinking water according to Federal and State laws. The following table(s) show all detections found in the period of January 1 to December 31, 2019 unless otherwise noted. The State


of Colorado requires us 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, or the system is not considered vulnerable to this type of contamination. Therefore, some of our data, though representative, may be more than one year old. Violations and Formal Enforcement Actions, if any, are reported in the next section of this report.

**Note:** Only detected contaminants sampled within the last 5 years appear in this report. If no tables appear in this section then no contaminants were detected in the last round of monitoring.

<b>Disinfectants Sampled in the Distribution System</b>						
<b>TT Requirement:</b> At least 95% of samples per period (month or quarter) must be at least 0.2 ppm <b><i>OR</i></b>						
If sample size is less than 40 no more than 1 sample is below 0.2 ppm						
<b>Typical Sources:</b> Water additive used to control microbes						
Disinfectant Name	Time Period	Results	Number of Samples Below Level	Sample Size	TT Violation	MRDL
Chlorine	December, 2019	<u>Lowest period</u> percentage of samples meeting TT requirement: 100%	0	1	No	4.0 ppm

<b>Lead and Copper Sampled in the Distribution System</b>								
Contaminant Name	Time Period	90 <sup>th</sup> Percentile	Sample Size	Unit of Measure	90 <sup>th</sup> Percentile AL	Sample Sites Above AL	90 <sup>th</sup> Percentile AL Exceedance	Typical Sources
Copper	08/20/2019 to 09/19/2019	0.18	5	ppm	1.3	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead	08/20/2019 to 09/19/2019	3	5	ppb	15	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

<b>Disinfection Byproducts Sampled in the Distribution System</b>									
Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
Total Haloacetic Acids (HAA5)	2019	23.6	23.6 to 23.6	1	ppb	60	N/A	No	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHM)	2019	67	67 to 67	1	ppb	80	N/A	No	Byproduct of drinking water disinfection



**Violations, Significant Deficiencies, and Formal Enforcement Actions**

**No Violations or Formal Enforcement Actions**

## LAFAYETTE CITY OF 2020 Drinking Water Quality Report Covering Data For Calendar Year 2019

*Public Water System ID: CO0107473*

**Esta es información importante. Si no la pueden leer, necesitan que alguien se la traduzca.**

We are pleased to present to you this year's water quality report. Our constant goal is to provide you with a safe and dependable supply of drinking water. Please contact the City of Lafayette, 1290 S. Public Road, Lafayette, Colorado 80026 or the Public Water System representative at 303-661-1277, with any questions or for public participation opportunities that may affect water quality.

### **General Information**

All 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 Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791) or by visiting [epa.gov/ground-water-and-drinking-water](http://epa.gov/ground-water-and-drinking-water).

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 of infections. These people should seek advice about drinking water from their health care providers. For more information about contaminants and potential health effects, or to receive a copy of the U.S. Environmental Protection Agency (EPA) and the U.S. Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and microbiological contaminants call the EPA Safe Drinking Water Hotline at (1-800-426-4791).

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:** viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- **Inorganic contaminants:** salts and metals, which 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.
- **Radioactive contaminants:** can be naturally occurring or be the result of oil and gas production and mining activities.
- **Organic chemical contaminants:** including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and also may come from gas stations, urban storm water runoff, and septic systems.

In order to ensure that tap water is safe to drink, the Colorado Department of Public Health and Environment prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

### Lead in Drinking Water

If present, elevated levels of lead can cause serious health problems (especially for pregnant women and young children). It is possible that lead levels at your home may be higher than other homes in the community as a result of materials used in your home’s plumbing. If you are concerned about lead in your water, you may wish to have your water tested. 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. Additional 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 [epa.gov/safewater/lead](http://epa.gov/safewater/lead).

### Source Water Assessment and Protection (SWAP)

The Colorado Department of Public Health and Environment may have provided us with a Source Water Assessment Report for our water supply. For general information or to obtain a copy of the report please visit [wqedcompliance.com/ccr](http://wqedcompliance.com/ccr). The report is located under “Guidance: Source Water Assessment Reports”. Search the table using 107473, LAFAYETTE CITY OF, or contact the City of Lafayette, 1290 S. Public Road, Lafayette, Colorado 80026 or the Public Water System representative at 303-661-1277. The Source Water Assessment Report provides a screening-level evaluation of potential contamination that **could** occur. It **does not** mean that the contamination **has or will** occur. We can use this information to evaluate the need to improve our current water treatment capabilities and prepare for future contamination threats. This can help us ensure that quality finished water is delivered to your homes. In addition, the source water assessment results provide a starting point for developing a source water protection plan. Potential sources of contamination in our source water area are listed on the next page.

Please contact us to learn more about what you can do to help protect your drinking water sources, any questions about the Drinking Water Quality Report, to learn more about our system, or to attend scheduled public meetings. We want you, our valued customers, to be informed about the services we provide and the quality water we deliver to you every day. City of Lafayette, 1290 S. Public Road, Lafayette, Colorado 80026 or the Public Water System representative at 303-661-1277.

### Our Water Sources

<u>Sources (Water Type - Source Type)</u>	<u>Potential Source(s) of Contamination</u>
RESERVOIR BASELINE (Surface Water-Intake) GOOSEHAVEN NO 2 RESERVOIR (Surface Water-Intake)	EPA Abandoned Contaminated Sites, EPA Hazardous Waste Generators, EPA Chemical Inventory/Storage Sites, EPA Toxic Release Inventory Sites, Permitted Wastewater Discharge Sites, Aboveground, Underground and Leaking Storage Tank Sites, Solid Waste Sites, Existing/Abandoned Mine Sites, Other Facilities, Commercial/Industrial/Transportation, High Intensity Residential, Low Intensity Residential, Urban Recreational Grasses, Row Crops, Fallow, Pasture / Hay, Deciduous Forest, Evergreen Forest, Mixed Forest, Septic Systems, Oil / Gas Wells, Road Miles

### Terms and Abbreviations

- **Maximum Contaminant Level (MCL)** – The highest level of a contaminant allowed in drinking water.
- **Treatment Technique (TT)** – A required process intended to reduce the level of a contaminant in drinking water.
- **Health-Based** – A violation of either a MCL or TT.

- **Non-Health-Based** – A violation that is not a MCL or TT.
- **Action Level (AL)** – the concentration of a contaminant which, if exceeded, triggers treatment and other regulatory requirements.
- **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 Contaminant Level Goal (MCLG)** – The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- **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.
- **Violation (No Abbreviation)** – Failure to meet a Colorado Primary Drinking Water Regulation.
- **Formal Enforcement Action (No Abbreviation)** – Escalated action taken by the State (due to the risk to public health, or number or severity of violations) to bring a non-compliant water system back into compliance.
- **Variance and Exemptions (V/E)** – Department permission not to meet a MCL or treatment technique under certain conditions.
- **Gross Alpha (No Abbreviation)** – Gross alpha particle activity compliance value. It includes radium-226, but excludes radon 222, and uranium.
- **Picocuries per liter (pCi/L)** – Measure of the radioactivity in water.
- **Nephelometric Turbidity Unit (NTU)** – Measure of the clarity or cloudiness of water. Turbidity in excess of 5 NTU is just noticeable to the typical person.
- **Compliance Value (No Abbreviation)** – Single or calculated value used to determine if regulatory contaminant level (e.g. MCL) is met. Examples of calculated values are the 90<sup>th</sup> Percentile, Running Annual Average (RAA) and Locational Running Annual Average (LRAA).
- **Average (x-bar)** – Typical value.
- **Range (R)** – Lowest value to the highest value.
- **Sample Size (n)** – Number or count of values (i.e. number of water samples collected).
- **Parts per million = Milligrams per liter (ppm = mg/L)** – One part per million corresponds to one minute in two years or a single penny in \$10,000.
- **Parts per billion = Micrograms per liter (ppb = ug/L)** – One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
- **Not Applicable (N/A)** – Does not apply or not available.
- **Level 1 Assessment** – A 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** – A very 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.



**Detected Contaminants**

LAFAYETTE CITY OF routinely monitors for contaminants in your drinking water according to Federal and State laws. The following table(s) show all detections found in the period of January 1 to December 31, 2019 unless otherwise noted. The State of Colorado requires us 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, or the system is not considered vulnerable to this type of contamination. Therefore, some of our data, though representative, may be more than one year old. Violations and Formal Enforcement Actions, if any, are reported in the next section of this report.

**Note:** Only detected contaminants sampled within the last 5 years appear in this report. If no tables appear in this section then no contaminants were detected in the last round of monitoring.

Disinfectants Sampled in the Distribution System						
<b>TT Requirement:</b> At least 95% of samples per period (month or quarter) must be at least 0.2 ppm <b><i>OR</i></b> If sample size is less than 40 no more than 1 sample is below 0.2 ppm <b>Typical Sources:</b> Water additive used to control microbes						
Disinfectant Name	Time Period	Results	Number of Samples Below Level	Sample Size	TT Violation	MRDL
Chlorine	December, 2019	<u>Lowest period</u> percentage of samples meeting TT requirement: 100%	0	30	No	4.0 ppm

Lead and Copper Sampled in the Distribution System								
Contaminant Name	Time Period	90 <sup>th</sup> Percentile	Sample Size	Unit of Measure	90 <sup>th</sup> Percentile AL	Sample Sites Above AL	90 <sup>th</sup> Percentile AL Exceedance	Typical Sources
Copper	06/09/2019 to 08/10/2019	0.03	35	ppm	1.3	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead	06/09/2019 to 08/10/2019	1.5	35	ppb	15	0	No	Corrosion of household plumbing systems; Erosion of natural deposits



Disinfection Byproducts Sampled in the Distribution System									
Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
Total Haloacetic Acids (HAA5)	2019	20.34	15.7 to 28.5	16	ppb	60	N/A	No	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHM)	2019	52.05	36.8 to 70.7	16	ppb	80	N/A	No	Byproduct of drinking water disinfection

Total Organic Carbon (Disinfection Byproducts Precursor) Removal Ratio of Raw and Finished Water								
Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	TT Minimum Ratio	TT Violation	Typical Sources
Total Organic Carbon Ratio	2019	1.46	0.92 to 1.85	12	Ratio	1.00	No	Naturally present in the environment
*If minimum ratio not met and no violation identified then the system achieved compliance using alternative criteria.								

Summary of Turbidity Sampled at the Entry Point to the Distribution System					
Contaminant Name	Sample Date	Level Found	TT Requirement	TT Violation	Typical Sources
Turbidity	Date/Month: Dec	<u>Highest single</u> measurement: 0.11 NTU	Maximum 1 NTU for any single measurement	No	Soil Runoff
Turbidity	Month: Dec	<u>Lowest monthly</u> percentage of samples meeting TT requirement for our technology: 100 %	In any month, at least 95% of samples must be less than 0.3 NTU	No	Soil Runoff

**Inorganic Contaminants Sampled at the Entry Point to the Distribution System**

Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
Barium	2019	0.05	0.05 to 0.05	1	ppm	2	2	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride	2019	0.67	0.67 to 0.67	1	ppm	4	4	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Selenium	2019	1	1 to 1	1	ppb	50	50	No	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines

**Secondary Contaminants\*\***

\*\*Secondary standards are non-enforceable guidelines for contaminants that may cause cosmetic effects (such as skin, or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water.

Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	Secondary Standard
Sodium	2019	31.3	31.3 to 31.3	1	ppm	N/A



**Violations, Significant Deficiencies, and Formal Enforcement Actions**

**Health-Based Violations**

**Maximum contaminant level (MCL) violations:** Test results for this contaminant show that the level was too high for the time period shown. Please read the information shown below about potential health effects for vulnerable populations. This is likely the same violation that we told you about in a past notice. We are evaluating, or we already completed an evaluation, to find the best way to reduce or remove the contaminant. If the solution will take an extended period of time, we will keep you updated with quarterly notices.

**Treatment technique (TT) violations:** We failed to complete an action that could affect water quality. Please read the information shown below about potential health effects for vulnerable populations. This is likely the same violation that we told you about in a past notice. We were required to meet a minimum operation/treatment standard, we were required to make upgrades to our system, or we were required to evaluate our system for potential sanitary defects, and we failed to do so in the time period shown below. If the solution will take an extended period of time, we will keep you updated with quarterly notices.

Name	Description	Time Period	Health Effects	Compliance Value	TT Level or MCL
STORAGE TANK RULE	FAILURE TO INSPECT STORAGE TANK(S) AND/OR FAILURE TO CORRECT STORAGE TANK DEFECTS - F318	11/08/2019 - Open	May pose a risk to public health.	N/A	N/A

**Additional Violation Information**

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

**STORAGE TANK RULE**

A failure to perform quarterly inspections of all treated water storage tanks was noticed during the Sanitary Survey Inspection performed in July, 2019 when records could not be produced to show that the quarterly inspections in the 4<sup>th</sup> Quarter of 2016 for two of the City’s Storage tanks were performed. Two tank inspections records for the 4<sup>th</sup> quarter of 2016 were missing from recordkeeping. Although no health issues were identified as the City (Supplier) continual collects samples throughout the distribution system, the missing records are a serious violation of storage tank inspection protocols and must be viewed as if the inspections were not performed, even though the other inspections for the 4<sup>th</sup> quarter of 2016 were performed. Failing to perform the required inspections constitutes a treatment technique violation of Regulation 11 of the State of Colorado. Subsequent records to the 4<sup>th</sup> quarter of 2016 and the other sampling conducted identified no health risks and no alternate water supplies were shown to be necessary. Since that time, electronic copying was instituted to back up the physical hardcopy of the inspections ensuring that all necessary inspections are completed and proper recordkeeping is maintained.

The storage tank defects F318 involved metal to metal contact on the emergency air vent flaps on the top of the two of the City’s treated water storage tanks was identified during the Sanitary Survey of July, 2019. The original construction of the emergency air vents where metal flaps contact metal flanges was deemed to be unacceptable by the inspector. New flaps were engineered and installed 2/27/2020, which have rubber interior surfaces eliminating the metal to metal contact of the emergency air vents on the tops of the two above ground treated water storage tanks. Any questions can be addressed by contacting the City of Lafayette, 1290 S. Public Road, Lafayette, Colorado 80026 or the Public Water System representative at 303-661-1277.

**Non-Health-Based Violations**

These violations do not usually mean that there was a problem with the water quality. If there had been, we would have notified you immediately. We missed collecting a sample (water quality is unknown), we reported the sample result after the due date, or we did not complete a report/notice by the required date.

Name	Description	Time Period
REVISED TOTAL COLIFORM RULE (RTCR)	FAILURE TO HAVE ADEQUATE COLIFORM BACTERIA SAMPLE SITES - R518	11/08/2019 - Open
CROSS CONNECTION RULE	FAILURE TO MEET CROSS CONNECTION CONTROL AND/OR BACKFLOW PREVENTION REQUIREMENTS - M610	11/08/2019 - Open

**Additional Violation Information**

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

**REVISED TOTAL COLIFORM RULE (RTCR)**

R518 -The failure to have adequate Coliform Bacteria Sample Sites is related to the Monitoring Plan as presented to the Colorado Department of Public Health and Environment (CDPHE) from the City of Lafayette. CDPHE requires each Public Water System to put together a Monitoring Plan outlining their system which includes a sampling protocol plan to ensure that the sampling adequately represents all of its public water system; and that proper quality control is maintained for the distribution of water to its constituency. In this situation, the actual sampling was conducted but some of the sampling sites were inadvertently removed from the Monitoring Plan as presented CDPHE. The complete sampling site list was added back to the Monitoring Plan and re-submitted to CDPHE. Any questions about this violation can be addressed by contacting the City of Lafayette, 1290 S. Public Road, Lafayette, Colorado 80026 or the Public Water System representative at 303-661-1277.

**CROSS CONNECTION RULE**

M610 – Regulation 11 Section 11.39(6)(b)(i) requires Suppliers to develop and implement a written backflow prevention and cross-connection control (BPCCC) program. While the Supplier (the City) has a BPCCC program, the violation occurred when the Supplier (the City) could not show that it had an adequate survey process or mechanism documenting the process for conducting surveys of potential and/or identified cross-connections. Uncontrolled cross-connections have the potential to cause severe health risks to consumers in the water distribution system. The City has addressed this situation by instituting a more robust tracking mechanism as well as setting a new construction survey process, which includes the Building and Planning Department plan review requiring identification and tracking of all domestic, fire and irrigation uses during the construction process. The new process also aids in updating devices during the remodel stage to new regulations. In addition, the City has developed re-survey triggers for Non Single Family Residence (NSFR) where double check containment assemblies are installed and all NSFR connections where no containment assemblies are installed. The new processes and tracking mechanisms were initiated on 12-19-2019 with updates as new information comes forth. For more information about this or other questions about Backflow Prevention and Cross-Connection Control please contact us at [backflow@cityoflafayette.com](mailto:backflow@cityoflafayette.com)

**Significant Deficiencies**

A situation, practice, or condition that may potentially result in drinking water quality that poses an unacceptable risk to public health and welfare and/or may potentially introduce contamination into the drinking water.

Date Identified	Deficiency Description	Deficiency Explanation and Steps Taken or Will Take to Correct	Estimated Completion Date
7/26/2019	T119 - PROPER OPERATION; Surface water or ground water under the direct influence (GWUDI) of surface water treatment operational practices. Regulation 11, Section 11.8(1)(b) and CDPHE-WQCD Policy 4.;	During the 2019 Sanitary Survey, the department reviewed the City’s treatment operational practices and observed deficiencies in the combined filter effluent (CFE) turbidity reporting. The Monthly Operating Report (MOR) did not contain the incidents of high turbidities within the CFE. The CFE’s were recorded in the Supervisory Control and Data Acquisition (SCADA) system continuously, but the SCADA system was not identifying incidents of high turbidity. Not identifying and reporting the maximum turbidities during the treatment process could lead to improper filtration which poses an unacceptable risk to public health. The City’s Treatment Plant has made programming changes to the SCADA system to accurately identify high turbidities within the CFE and save the incident information which is then reported on the updated MOR. Revised CFE turbidity incident review and recovery update to SCADA system completed on 11/20/2019.	November 20, 2019
7/26/2019	R514 - BACTI WRITTEN SAMPLE-SITING PLAN; System lacks a properly designed or does not maintain a total coliform (TCR) sampling plan. This is an alleged violation of the CPDWR 1.12.1(e), 5.1.1(a).;	During the 2019 Sanitary Survey, the department inspector’s review of the written sampling site plan determined the plan to not be representative of the complete water distribution system. The failure to have adequate Coliform Bacteria Sample Sites is related to the Monitoring Plan as presented to the Colorado Department of Public Health and Environment (CDPHE) from the City of Lafayette. CDPHE requires each Public Water System to put together an outline their system known as a Monitoring Plan and as part of the Monitoring Plan, complete a sampling protocol plan to ensure that sampling adequately represents all of its public water system and proper quality control is maintained for the distribution of water to its constituency. The	December 20, 2019

**Significant Deficiencies**

A situation, practice, or condition that may potentially result in drinking water quality that poses an unacceptable risk to public health and welfare and/or may potentially introduce contamination into the drinking water.

Date Identified	Deficiency Description	Deficiency Explanation and Steps Taken or Will Take to Correct	Estimated Completion Date
		actual sampling was conducted but some of the sampling sites were inadvertently removed from the Monitoring Plan as presented CDPHE. The department inspector noted as well that some finished water samples were collected before disinfection contact time was achieved due to incorrect sample location. In an effort to correct discrepancies, certain sample sites were re-labeled and new sampling protocols were introduced in ensure proper representative samples were collected.	
7/26/2019	F317 - AIR VENT OPENING; Improper air vent openings.;	During the 2019 Sanitary Survey, the department inspector observed the Red Zone Treated water storage tank to have defects with the emergency air vent flaps as the flaps were not closing completely and the original design of the air vent flaps were not watertight as well as allowing the metal flaps to directly contact the metal base flanges. The metal to metal contact made the flaps susceptible to corrosion and would potentially allow insects into the tank which could introduce contamination into the tank. New flaps were engineered and installed 2/27/2020, which have rubber interior surfaces eliminating the metal to metal contact and make the seals water tight	March 13, 2020
7/26/2019	F317 - AIR VENT OPENING; Improper air vent openings.;	During the 2019 Sanitary Survey, the department inspector observed the Blue Zone Treated water storage tank to have defects with the emergency air vent flaps as the flaps were not closing completely and the original design of the air vent flaps were not watertight as well as allowing the metal flaps to directly contact the metal base flanges. The metal to metal contact made the flaps susceptible to corrosion and would potentially allow insects into the tank which could introduce contamination into the tank.	March 13, 2020

**Significant Deficiencies**

A situation, practice, or condition that may potentially result in drinking water quality that poses an unacceptable risk to public health and welfare and/or may potentially introduce contamination into the drinking water.

Date Identified	Deficiency Description	Deficiency Explanation and Steps Taken or Will Take to Correct	Estimated Completion Date
		New flaps were engineered and installed 2/27/2020, which have rubber interior surfaces eliminating the metal to metal contact and make the seals water tight.	
7/26/2019	F310 - STORAGE CONDITION; The condition of the storage structure may allow potential sources of contamination to enter the tank.;	At the time of the Sanitary Survey, the department inspector observed that access hatches were not properly gasketed which could potentially allow contamination to enter the storage tanks. New gaskets were installed as necessary. Caulking was used where gaskets were still in good shape to re-attach the gasket to the surface. Open tank penetrations were sealed to prevent any potential intrusion by insects.	December 20, 2019

**Any questions can be addressed by contacting the City of Lafayette, 1290 S. Public Road, Lafayette, Colorado 80026 and/or Public Water System representative at 303-661-1277.**

**Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses).**