

# TOWN OF ERIE

## 2016 DRINKING WATER CONSUMER CONFIDENCE REPORT (CCR)

### FOR CALENDAR YEAR 2015

If you have any questions regarding this report, please contact the Department of Public Works at 303-926-2870.

We are pleased to present to you the Annual Water Quality Report for the year 2015. This report is designed to provide our water customers with information about the quality water and services the Town of Erie delivers to you daily. Our constant goal is to provide you with a high quality supply of available drinking water at all times. The Town's water operators perform thousands of water tests each year to ensure quality drinking water. The Town staff also monitors drinking water according to federal and state laws for possible contaminants. We are proud that Erie meets and exceeds all federal and state drinking water standards. Erie continues to meet increasingly high water quality standards in a cost-effective manner for the citizens of Erie.



**TOWN OF ERIE | LYNN R. MORGAN WATER TREATMENT FACILITY**  
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Esta es información importante. Si no la pueden leer, necesitan que alguien se la traduzca.



# DETECTED CONTAMINANTS

Town of Erie 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, 2015 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.

## LEAD AND COPPER SAMPLED IN THE DISTRIBUTION SYSTEM

CONTAMINANT NAME	MONITORING PERIOD	90TH PERCENTILE	NUMBER OF SAMPLES	UNIT OF MEASURE	AL	SAMPLE SITES ABOVE AL	90TH PERCENTILE AL EXCEEDANCE	TYPICAL SOURCES
COPPER	09/22/2015 to 09/22/2015	0.18	30	ppm	1.3	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
LEAD	09/22/2015 to 09/22/2015	12	30	ppb	15	2	No	Corrosion of household plumbing systems; Erosion of natural deposits

## DISINFECTION BY PRODUCTS SAMPLED IN THE DISTRIBUTION SYSTEM

CONTAMINANT NAME	YEAR	AVERAGE OF INDIVIDUAL SAMPLES	RANGE OF INDIVIDUAL SAMPLES (LOWEST-HIGHEST)	NUMBER OF SAMPLES	UNIT OF MEASURE	MCL	MCLG	MCL VIOLATION?	TYPICAL SOURCES
TOTAL HALOACETIC ACIDS (HAA5)	2015	21.44	11.5 - 34.3	16	ppb	60	N/A	No	By-product of drinking water disinfection.
TOTAL TRIHALO-METHANES (TTHM)	2015	50.76	29.1 - 67.5	16	ppb	80	N/A	No	By-product of drinking water disinfection.

## TURBIDITY SAMPLED AT THE ENTRY POINT TO THE DISTRIBUTION SYSTEM

CONTAMINANT NAME	SAMPLE DATE	LEVEL FOUND	TT REQUIREMENT	TT VIOLATION?	TYPICAL SOURCES
TURBIDITY	June, 2015	Highest single measurement: 0.1 NTU	Maximum 1 NTU for any single measurement	No	Soil Runoff
TURBIDITY	December, 2015	Lowest monthly percentage of samples meeting TT requirement for our technology: 100%	In any month, at least 95% of samples must be less than 0.1 NTU	No	Soil Runoff

## INORGANIC CONTAMINANTS SAMPLED AT THE ENTRY POINT TO THE DISTRIBUTION SYSTEM

CONTAMINANT NAME	YEAR	AVERAGE OF INDIVIDUAL SAMPLES	RANGE OF INDIVIDUAL SAMPLES (LOWEST-HIGHEST)	NUMBER OF SAMPLES	UNIT OF MEASURE	MCL	MCLG	MCL VIOLATION?	TYPICAL SOURCES
FLUORIDE	2015	0.61	0.61 - 0.61	1	ppm	4	4	No	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories.
NITRATE	2015	0.08	0.08 - 0.08	1	ppm	10	10	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

## UNREGULATED CONTAMINANTS\*

EPA has implemented the Unregulated Contaminant Monitoring Rule (UCMR) to collect data for contaminants that are suspected to be present in drinking water and do not have health-based standards set under the Safe Drinking Water Act. EPA uses the results of UCMR monitoring to learn about the occurrence of unregulated contaminants in drinking water and to decide whether or not these contaminants will be regulated in the future. We performed monitoring and reported the analytical results of the monitoring to EPA in accordance with its Third Unregulated Contaminant Monitoring Rule (UCMR3). Once EPA reviews the submitted results, the results are made available in the EPA's National Contaminant Occurrence Database (NCOD) (<http://www.epa.gov/dwucmr/national-contaminant-occurrence-database-ncod>) Consumers can review UCMR results by accessing the NCOD. Contaminants that were detected during our UCMR3 sampling and the corresponding analytical results are provided below.

CONTAMINANT NAME	YEAR	AVERAGE OF INDIVIDUAL SAMPLES	RANGE OF INDIVIDUAL SAMPLES (LOWEST-HIGHEST)	NUMBER OF SAMPLES	UNIT OF MEASURE
CHLORATE	2015	165.9	70.4 - 275.0	8	ppb
STRONTIUM	2015	89.4	43.0 - 185.0	8	ppb
CHROMIUM	2015	0.200	0.0 - 0.361	8	ppb
CHROMIUM, HEXAVALENT	2015	0.019	0.0 - 0.041	8	ppb
VANDIUM	2015	0.291	0.0 - 0.646	8	ppb

- \*More information about the contaminants that were included in UCMR3 monitoring can be found at: [www.drinktap.org/water-info/whats-in-my-water/unregulated-contaminant-monitoring-rule.aspx](http://www.drinktap.org/water-info/whats-in-my-water/unregulated-contaminant-monitoring-rule.aspx).
- Learn more about the EPA UCMR at: <http://www.epa.gov/dwucmr/learn-about-unregulated-contaminant-monitoring-rule> or contact the Safe Drinking Water Hotline at (800) 426-4791 or <http://water.epa.gov/drink/contact.cfm>.

# VIOLATIONS, SIGNIFICANT DEFICIENCIES, & FORMAL ENFORCEMENT ACTIONS

## VIOLATION(S) AND FORMAL ENFORCEMENT ACTION(S)

VIOLATIONS	FORMAL ENFORCEMENT ACTIONS
No Violations to Report	No Formal Enforcement Actions to Report

## SIGNIFICANT DEFICIENCIES

DATE IDENTIFIED	DEFICIENCY DESCRIPTION	STEPS TAKING TO CORRECT AND PROGRESS TO DATE	ESTIMATED COMPLETION DATE
12/01/2015	R540 - DESIGN APPROVAL; System has not received plans and specs approval for the system or for renovations to the system, including the addition of new sources, changes in treatment or changes in the distribution system. This is an alleged violation of CPDWR 1.1	This deficiency was issued because the Town did not seek prior approval from the State Water Quality Control Division to pilot test a powder activated carbon system. The Town is currently in the design and approval phase for a permanent installation of the carbon feed system.	September 2016



## TREATMENT FACTS

- In 2015, the Town treated 1.008 billion gallons of water.
- The average daily flow is 2.8 million gallons per day.
- The highest daily flow was 6.9 million gallons per day in July.
- Erie has performed over 1,200 water tests at various locations throughout the Town.
- The maximum amount of water that can be produced is 9.9 million gallons per day.

# TERMS & ABBREVIATIONS

## UNDERSTANDING THE DETECTED CONTAMINANTS REPORT

**ACTION LEVEL (AL)** – The concentration of a contaminant which, if exceeded, triggers treatment and other regulatory requirements.

**AVERAGE (X-BAR)** – Typical value.

**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 90th Percentile, Running Annual Average (RAA) and Locational Running Annual Average (LRAA).

**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.

**GROSS ALPHA (NO ABBREVIATION)** – Gross alpha particle activity compliance value. It includes radium-226, but excludes radon 222, and uranium.

**MAXIMUM CONTAMINANT LEVEL (MCL)** – The highest level of a contaminant allowed in 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 allow for a margin of safety.

**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.

**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.

**NOT APPLICABLE (N/A)** – Does not apply or not available.

**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.

**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.

**PICOCURIES PER LITER (PCI/L)** – Measure of the radioactivity in water.

**RANGE (R)** – Lowest value to the highest value.

**SAMPLE SIZE (N)** – Number or count of values (i.e. number of water samples collected).

**TREATMENT TECHNIQUE (TT)** – A required process intended to reduce the level of a contaminant in drinking water.

**VARIANCE AND EXEMPTIONS (V/E)** – Department permission not to meet a MCL or treatment technique under certain conditions.

**VIOLATION (NO ABBREVIATION)** – Failure to meet a Colorado Primary Drinking Water Regulation.

## ERIE DOES NOT HAVE ELEVATED LEVELS OF LEAD IN OUR 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 at 1-800-426-4791 or [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

## 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.

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** or visit **[www.water.epa.gov/drink/contaminants](http://www.water.epa.gov/drink/contaminants)**.



The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. 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 stormwater 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 stormwater 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.

## SOURCE WATER ASSESSMENT & PROTECTION (SWAP)

The Colorado Department of Public Health and Environment has provided a Source Water Assessment Report for the Town of Erie's water supply. For general information or to obtain a copy of the report, please visit [www.wqcdcompliance.com/ccr](http://www.wqcdcompliance.com/ccr). The report is located under "Source Water Assessment Reports", and then "Assessment Report by County". Select **BOULDER** County and find **162255; ERIE TOWN OF**.

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. The Town of Erie completed a voluntary Source Water Protection Plan in 2013, which can be viewed at [www.erieco.gov/water](http://www.erieco.gov/water).

A summary of all potential sources of contamination for the Town of Erie's source waters include: EPA Hazardous Waste Generators, Residential, Urban Recreational Grasses, EPA Chemical Inventory/Storage Sites, Agriculture, Permitted Wastewater Discharge Sites, Forest, Aboveground/Underground and Leaking Storage Tank Sites, Solid Waste Sites, Existing/Abandoned Mine, Septic Systems, Road Miles, Commercial/Industrial/Transportation, Oil/Gas Wells.

View the Town of Erie's Source Water Assessment Report & Plan online at [www.erieco.gov/water](http://www.erieco.gov/water).

Please contact the Town of Erie to learn more about what you can do to help protect your drinking water sources, any questions about the Drinking Water Consumer Confidence 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.

[www.erieco.gov/water](http://www.erieco.gov/water)

## OUR WATER SOURCES

SOURCE:	Northern Water Pipeline Carter Lake	Erie Lake	Thomas Reservoir	Gross Reservoir S. Bldr Canyon Ditch	Purchased from Lafayette C00107473	Purchased from Lefthand C00107471
SOURCE TYPE:	Intake	Intake	Intake	Intake	Emergency Consecutive Connection*	Emergency Consecutive Connection*
WATER TYPE:	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water

The Town of Erie's primary water source is the Colorado-Big Thompson Project (C-BT), which originates on the western slope and is delivered via pipeline from Carter Lake in Berthoud to our Water Treatment Facility in Erie. C-BT water is also delivered via pipeline to our reservoirs for storage in Erie or Thomas Reservoir. We also fill our reservoirs via the South Boulder Canyon Ditch which originates from Gross Reservoir in Boulder. There are pipelines that carry water from our reservoirs directly to our Water Treatment Facility.

\*Lafayette and Lefthand are constant connections that are only used in emergency situations.