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3rd Monday of each Month @ 6PM

Sacramento Waterworks purchases water from two sources. Mc Lean County Regional Water Commission (MCRWC) is our primary source. MCRWC utilizes water from the Green River, which is classified as surface water. Muhlenberg Co Water District #3, is our second source, who in turn buys from Central City Water & Sewer (CCWS). CCWS treats surface water from the Green River. CCWS & MCRWC have completed Source Water Assessment Plans to identify potential sources of contamination. For the most part the susceptibility to contamination is generally moderate but there are some activities that are rated high. Roads, railroads, & culverts near the intakes pose a higher risk due to the potential for accidental spills. Mining and oil and gas wells also pose a threat. Agriculture and urban runoff may cause sediment, oil and grease, road salt, fertilizers, pesticides, nutrients, toxics, and other contaminants to enter the water source. The complete Source Water Assessment Plans are available for review. MCRWC's source water assessment is available at the Green River Area Development District., (270) 926-4433. CCWS's source water assessment is available at the Pennyrite Area Development District, (270) 886-9484.

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 may be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (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 may 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, (sewage plants, septic systems, livestock operations, or wildlife). Inorganic contaminants, such as salts and metals, (naturally occurring or from stormwater runoff, wastewater discharges, oil and gas production, mining, or farming). Pesticides and herbicides, (stormwater runoff, agriculture or residential uses). Organic chemical contaminants, including synthetic and volatile organic chemicals, (by-products of industrial processes and petroleum production, or from gas stations, stormwater runoff, or septic systems). Radioactive contaminants, (naturally occurring or from oil and gas production or mining activities). In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water to provide the same protection for public health.

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. EPA/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 (800-426-4791).

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 service lines and home plumbing. Your local public water system 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/safewater/lead>.

Some or all of these definitions may be found in this report:

Maximum Contaminant Level (MCL) - the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

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.

Below Detection Levels (BDL) - laboratory analysis indicates that the contaminant is not present.

Not Applicable (N/A) - does not apply.

Parts per million (ppm) - or milligrams per liter, (mg/L). One part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) - or micrograms per liter, (µg/L). One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Parts per trillion (ppt) - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

Parts per quadrillion (ppq) - one part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000,000.

Picocuries per liter (pCi/L) - a measure of the radioactivity in water.

Millirems per year (mrem/yr) - measure of radiation absorbed by the body.

Million Fibers per Liter (MFL) - a measure of the presence of asbestos fibers that are longer than 10 micrometers.

Nephelometric Turbidity Unit (NTU) - a measure of the clarity of water. Turbidity has no health effects. However, turbidity can provide a medium for microbial growth.

Turbidity is monitored because it is a good indicator of the effectiveness of the filtration system.

Variances & Exemptions (V&E) - State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

Action Level (AL) - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system shall follow.

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

Spanish (Español) Este informe contiene información muy importante sobre la calidad de su agua beber. Tradúzcalo o hable con alguien que lo entienda bien.

The data presented in this report are from the most recent testing done in accordance with administrative regulations in 401 KAR Chapter 8. As authorized and approved by EPA, the State has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data in this table, though representative, may be more than one year old. Copies of this report are available upon request by contacting our office during business hours.

To understand the possible health effects described for many regulated contaminants, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect. **A= Sacramento Waterworks, B= Mc Lean County Regional Water Commission, C=Muhlenberg County Wter District (Central City WTP)**

	Allowable Levels	Source	Highest Single Measurement	Lowest Monthly %	Violation	Likely Source of Turbidity
Turbidity (NTU) TT	No more than 1 NTU*	B=	0.26	100	No	Soil runoff
* Representative samples of filtered water	Less than 0.3 NTU in 95% monthly samples	C=	0.08	100	No	

Regulated Contaminant Test Results

Contaminant [code] (units)	MCL	MCLG	Source	Report Level	Range of Detection	Date of Sample	Violation	Likely Source of Contamination
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Inorganic Contaminants

Barium [1010] (ppm)	2	2	B= C=	0.026 0.026	0.026 to 0.026 0.026 to 0.026	March-18 Oct-18	No No	Drilling wastes; metal refineries; erosion of natural deposits
Copper [1022] (ppm) sites exceeding action level 0	AL = 1.3	1.3	A=	0.017 (90 th percentile)	0.0011 to 0.019	July-17	No	Corrosion of household plumbing systems
Fluoride [1025] (ppm)	4	4	B= C=	0.7 0.7	0.7 to 0.7 0.7 to 0.7	March-18 Oct-18	No No	Water additive which promotes strong teeth
Nitrate [1040] (ppm)	10	10	B= C=	1.48 1.2	0.911 to 1.48 1.2 to 1.2	March-18 Jan-18	No No	Fertilizer runoff; leaching from septic tanks, sewage; erosion of natural deposits

Disinfectants/Disinfection Byproducts and Precursors

Total Organic Carbon (ppm) (report level=lowest avg. range of monthly ratios)	TT*	N/A	B= C=	1.71 1.73	1.33 to 2.89 1.76 to 2.3	2018 2018	No No	Naturally present in environment.
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*Monthly ratio is the % TOC removal achieved to the % TOC removal required. Annual average must be 1.00 or greater for compliance.

Chlorine (ppm)	MRDL = 4	MRDLG = 4	A=	1.45 (highest average)	0.27 to 1.90	2018	No	Water additive used to control microbes.
HAA (ppb) (Stage 2) [Haloacetic acids]	60	N/A	A=	70 (average)	24 to 68 (range of individual sites)	2018	YES	Byproduct of drinking water disinfection
TTHM (ppb) (Stage 2) [total trihalomethanes]	80	N/A	A=	69 (average)	26 to 100 (range of individual sites)	2018	No	Byproduct of drinking water disinfection.

Other Contaminants

Cryptosporidium [oocysts/L]	0	TT	B= C=	1 2	4 8	2018 2018	No No	Human and animal fecal waste
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(99% removal) (positive samples) (no. of samples)

Cryptosporidium. We are required to monitor the source of your drinking water for Cryptosporidium in order to determine whether treatment at the water treatment plant is sufficient to adequately remove Cryptosporidium from your drinking water. Cryptosporidium is a microbial pathogen found in surface water. **Central City/Cryptosporidium** was detected in 2 sample of 8 collected from the raw water source for our water system. It was not detected in the finished water. Current test methods do not enable us to determine if the organisms are dead or if they are capable of causing disease. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Cryptosporidium must be ingested to cause disease and it may be spread through means other than drinking water. **MCRWC/Cryptosporidium** was detected in 1 sample of 4 collected from the raw water source for our water system. It was not detected in the finished water. Current test methods do not enable us to determine if the organisms are dead or if they are capable of causing disease. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Cryptosporidium must be ingested to cause disease and it may be spread through means other than drinking water.

Notice of Violation 2018-9658817 Testing results from 01/01/2018-03/31/2018 shows that our system exceeded the standard, or maximum contaminant level(MCL), for HAA5 a disinfection byproduct. The standard for HAA5 is 0.060mg/l. It is determined by averaging all the samples collected at each sampling location for the past 12 months. The level of HAA5 averaged at one of our system's locations for 01/01/2018-03/31/2018 was .066mg/l. **Remedial Measures** Our system returned to compliance in the 3rd quarter of 2018. When sampling again we will flush our system longer at each sample point to get better results. Other remedial actions included performing public notification, required certification and detailing this violation in the 2018 Consumer Confidence Report. **Haloacetic acids (HAA5)** People who drink water containing haloacetic acids (HAA5) in excess of the MCL over many years may have an increased risk of getting cancer.

Notice of Violation 2018-9658818 Testing results from 04/01/2018-06/30/2018 shows that our system exceeded the standard, or maximum contaminant level(MCL), for HAA5 a disinfection byproduct. The standard for HAA5 is 0.060mg/l. It is determined by averaging all the samples collected at each sampling location for the past 12 months. The level of HAA5 averaged at one of our system's locations for 01/01/2018-03/31/2018 was .070 mg/l. **Remedial Measures** Our system returned to compliance in the 3rd quarter of 2018. When sampling again we will flush our system longer at each sample point to get better results. Other remedial actions included performing public notification, required certification and detailing this violation in the 2018 Consumer Confidence Report. **Haloacetic acids (HAA5)** People who drink water containing haloacetic acids (HAA5) in excess of the MCL over many years may have an increased risk of getting cancer.

Health Effects To understand the possible health effects described for many regulated contaminants, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Notice of Violation 2018 - 9658819 / 35 FAILURE SUBMIT OEL REPORT FOR HAA5

Our water system violated one or more drinking water standards over the past year. Even though these were not emergencies, as our customers, you have a right to know what happened and what we did to correct these situations.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During 04/01/2018-06/30/2018 we did not complete all monitoring or testing for 2456 TOTAL HALOACETIC ACIDS (HAA5) and therefore cannot be sure of the quality of your drinking water during that time.

There is nothing you need to do at this time. You do not need to use an alternative (e.g., bottled) water supply.

What happened? Who is at risk? What is being done?

Notice of Violation 2018 - 9658819 / 35 FAILURE SUBMIT OEL REPORT FOR HAA5 **Description of Noncompliance:** 401 KAR 8:510 Section1(1) TOTAL HALOACETIC ACIDS (HAA5) The public water system failed to submit Operational Evaluation Levels (OEL'S) report for compliance period 04/01/2018-06/30/2018. **Comments:** Failed to submit 1st QTR 2018 OEL Report 90 days after the quarter. **Remedial Measures:** Perform public notification and the required certification. Discuss this violation in the 2018 CCR. We now input data into a spreadsheet to assure if an OEL Report is required. **Health Effects:** There were no health effects due to this administrative oversight.

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.

This report will not be sent to individual customers. It will be available at City Hall.