



Dear Elbert Creek Water Customer,

January 24, 2020

Consistent with the notice you are receiving as part of this communication, I wanted to provide you with some additional background information regarding this topic. As set forth in the notice, Elbert Creek Water Company (“ECWC”) exceeded its Operational Evaluation Level (OEL) for Total Trihalomethanes (TTHMs) in the 4<sup>th</sup> quarter of 2019. In accordance with Colorado law, we test quarterly for TTHMs. As you can see from the chart below which tracks our quarterly readings from 2019, the running annual average maximum contaminant level for TTHMs as established by the Colorado Department of Public Health and Environment (“CDHPE”) is 80 ug/L. Our 2019 average is 80.93, which exceeded the CDPHE benchmark by 1.16%.

1st Quarter Jan-Mar 2019 48.4 ug/L	2 <sup>nd</sup> Quarter April-June 128 ug/L	3 <sup>rd</sup> Quarter July-Sept 67.5ug/L	4 <sup>th</sup> Quarter 79.8 ug/L	Average Compliance Value 80.93 (80 ug/L MCL is the CDPHE maximum)
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As you can see, this problem was primarily caused by our 2<sup>nd</sup> quarter sample. The 2<sup>nd</sup> quarter sample represents the springtime months when many rivers and streams receive runoff waters from surrounding areas. These runoff waters often contain elevated levels of organic carbon matter. The spring of 2019 was especially difficult for our area because of the 416 Fire, which occurred in June, 2018. Given the exceptionally heavy snowpack last winter, Elbert Creek (a substantial source of water for ECWC) received significant runoff and ash flows from areas directly affected by the 416 Fire. This is a common issue during the spring runoff with many similar water systems. The elevated levels of organic carbon increased the amount of chlorine used for disinfection, which in turn increased the TTHMs for that quarter. As you can see on the chart above, levels came back down to a rate below the TTHM maximum contaminant level for the 3<sup>rd</sup> and 4<sup>th</sup> quarters of 2019.

We also experienced a related violation with respect to our total organic carbon (“TOC”) sampling. Consistent with CDPHE requirements, we conduct monthly sampling of TOCs. As a water supplier, we must remove TOCs consistent with the CDPHE standard. Specifically, CDPHE has set the running annual average TOC removal ratio at 1.0 or higher.

Below are ECWC’s monthly TOC removal ratios from October, 2018 through December, 2019, inclusive.

Month	Monthly TOC Removal Ratio	Running Annual Average at End of Quarter (12-month lookback)
October 2018	2.86	
November 2018	0.74	
December 2018	1.15	1.21*
January 2019	1.00	
February 2019	1.20	
March 2019	1.40	1.28*
April 2019	0.26	
May 2019	0.43	
June 2019	0.38	1.11*
July 2019	0.60	
August 2019	0.65	
September 2019	1.23	0.99
October 2019	1.25	
November 2019	1.59	
December 2019	1.23	0.94

As you can see, our monthly removal ratios on either side of the Spring runoff period complied with the CDPHE TOC removal ratio of 1.0 or more. However, during the heavy runoff season created by the exceptional 2018-19 snowpack (which runoff was heaviest from April, 2019 through August, 2019), we experienced inadequate TOC removal ratios. Consequently, our running annual average TOC removal ratios dropped below the 1.0 threshold for the 3<sup>rd</sup> and 4<sup>th</sup> quarters of 2019 (using the prior 12 months of data as of the end of each quarter).

**What we are doing to fix the issue:** Currently, ECWC is consulting with Colorado licensed engineers as well as working closely with the CDPHE to remediate these 2 related issues. Our engineers will provide CDPHE with their evaluation report including all remediation recommendations. Upon CDPHE’s approval of the report and recommendations, ECWC will implement the recommendations.

As well, in 2019, we enhanced ECWC’s Hydrant Flushing Program to clear water main lines of TOCs and keep fresher water in the water lines. We believe this process should also assist ECWC in gaining compliance with the relevant CDPHE requirements.

Also, ECWC is evaluating the blend of source waters (well and surface waters), times throughout the year they are used, and optimizing those sources based upon the time of year. For instance, we anticipate relying more on well water during the spring runoff rather than depending upon Elbert Creek. Ground water typically has lower levels of TOCs than snow runoff fed surface waters such as Elbert Creek.

The remediation timeline is ongoing and will be dictated by CDPHE. Nevertheless, we are hopeful that ECWC will gain compliance with the CDPHE's TTHM and TOC removal ratio requirements by the 3<sup>rd</sup> quarter of 2020. Rest assured that ECWC and our engineers are diligently working to develop solutions to these 2 problems so they don't recur.

If you have any questions, please contact me at [jgoodman@theglacierclub.com](mailto:jgoodman@theglacierclub.com) or 970.382.6710 and I will be happy to assist you.

Sincerely,

A handwritten signature in black ink that reads "Jim Goodman". The signature is fluid and cursive, with the first name "Jim" being more prominent than the last name "Goodman".

**Jim Goodman**  
**Elbert Creek Water Company**  
**Chief Operating Officer**