December 18, 2015 Water Quality Update

In April, UAF Facilities Services issued the first notice to the campus community that the campus drinking water had exceeded federal limits for total trihalomethanes, also known as TTHMs. Today we issued a similar notice, but in addition to exceeding the allowable TTHM limits, the campus drinking water also exceeds federal limits for five haloacetic acids, also known as HAA5s. As was the case in April, the campus water is safe to drink. If it was not, we would be required by law to tell you so. You don’t need to do anything different regarding your water. However, the Environmental Protection Agency does suggest that you check with your doctor if you are pregnant, have a compromised immune system, have an infant or are elderly. Point-of-use activated carbon filters will remove 90% of HAA5 and THHM from drinking water.

Both trihalomethanes and haloacetic acids form in drinking water when chlorine, which is used to disinfect drinking water, reacts with the high levels of natural organic material in the UAF source water. In May 2015, UAF began carbon filtration all campus drinking water to reduce the amount of organic material in our water and reduce TTHM levels. Unfortunately, filtering has only marginally decreased the levels of TTHM, and has not stopped the increase in HAA5 levels. Because the EPA sets TTHM and HAA5 limits based on a year-long average it will take several low quarterly readings to bring the running averages below the EPA limits.

To address this problem, in August UAF contracted with College Utilities Corporation (CUC) to begin purchasing our potable water from them by March 1, 2016. CUC will construct a new water main to deliver potable water to our campus distribution system. UAF will shut down our potable water treatment system once the CUC connection is operational. The CUC source water is much lower in TOCs than the UAF source water and levels of TTHM and HAA5 in CUC water are well below allowable limits. A copy of the most recent CUC water quality report is available on the Facilities Services website.

It is still safe to continue using campus water for bathing, drinking and cooking. Please visit this link for answers to frequently asked questions about this issue: http://bit.ly/uaffacilities. If you have additional questions or concerns, please feel free to contact Facilities Services at 474-7000.
IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Total Trihalomethanes (TTHM) and Haloacetic Acid 5 (HAA5) MCL Exceeded at the University of Alaska Fairbanks (UAF)

Our water system recently exceeded a drinking water standard. Although this incident was not an emergency, as our customers, you have a right to know what happened and what we are doing to correct this situation.

We routinely monitor for the presence of drinking water contaminants. Testing results show that our system exceeded the Locational Running Annual Average (LRAA) standard (Stage 2 Disinfectants and Disinfection Byproducts Rule) maximum contaminant level (MCL) for TTHM and HAA5 in the 4th quarter of 2015. The LRAA is determined by averaging the sample analytical results for samples taken, according to a compliance monitoring plan, at a particular monitoring location during the previous four calendar quarters. The standard/MCL for TTHM is 0.080 mg/L. The level of TTHM at the Museum sampling location in the 4th quarter of 2015 averaged 0.121 mg/L. The standard/MCL for HAA5 is 0.060 mg/L. The level of HAA5 at the Bunnell sampling location in the 4th quarter of 2015 averaged 0.070 mg/L.

What should I do?

- There is nothing you need to do. You do not need to boil your water or take other corrective actions. If a situation arises where the water is no longer safe to drink, you will be notified within 24 hours.
- If you have a severely compromised immune system, have an infant, are pregnant, or are elderly, you may be at increased risk and should seek advice from your health care providers about drinking this water.

What does this mean?

This is not an emergency. If it had been an emergency, you would have been notified within 24 hours.

TTHM are four volatile organic chemicals and HAA5 are five haloacetic acid compounds which form when disinfectants react with natural organic matter in the water.

*People who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous system, and may have an increased risk of getting cancer. People who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.*

What is being done?

In late August, UAF contracted with College Utilities Corporation (CUC) to provide treated drinking water to the campus. The connection to CUC should be complete by March 1, 2016. The TTHM and HAA5 levels in CUC water are significantly below the EPA allowable limits due to CUC having source water with lower levels of natural organic matter than the UAF groundwater. Until the CUC water is available to campus UAF will continue to operate the central carbon filtration system to reduce TTHM and HAA5 levels in the campus drinking water. After connection to CUC, UAF will continue to monitor the drinking water quality on campus through sampling. Also, UAF conducted a water system operation evaluation November 2015 to determine if additional methods to reduce TTHM and HAA5 formation will be needed and can be implemented. This report is available upon request.

For more information about the TTHM and HAA5 exceedances, including links to resources discussing TTHM and HAA5, please visit the UAF Facilities Services website (www.uaf.edu/fs/), or contact Associate Vice Chancellor Scott Bell at 474-7000.

***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 notice is being sent to you by the University of Alaska Fairbanks

Public Water System ID#: 310683

Date posted/distributed: December 18, 2015
FAQs  (updated December 18, 2015)

Is campus water safe to drink?
As mentioned in the EPA-approved notice sent to the campus, the water is safe to drink. The EPA does recommend that people with a severely compromised immune system, who have an infant, are pregnant, or are elderly, seek advice from a health care provider about drinking the water.

What are the health effects from consuming these levels of TTHM and HAA5?
Health effects from the low level of TTHMs and HAA5s in the UAF water system would only come from very long-term consumption of the water. As stated in the EPA-approved notice sent to the campus, “People who drink water containing trihalomethanes in excess of the MCL (the recommended maximum limit) over many years may experience problems with their liver, kidneys, or central nervous system, and may have an increased risk of getting cancer. People who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.”

Is campus water safe to shower in?
Yes, the water is safe for bathing and showering. TTHM and HAA5 can be absorbed through the skin and inhaled during showering, however the health effects from absorption and inhalation are similar to those from drinking water with TTHM and HAA5.

Is this why campus water tastes bad?
No, the TTHMs and HAA5s do not contribute to the taste of UAF water.

What are the EPA limits on TTHMs and HAA5 in the water and what were UAF levels?
The EPA limit for TTHM is 80 parts per billion, and for HAA5 is 60 parts per billion. The latest results (November 2015) are 121 parts per billion for TTHM, and 70 parts per billion for HAA5.

How long have the levels been high?
In July of 2014, we tested the water and TTHM levels were higher than expected, but the one-year average remained below the EPA limit. Levels of TTHM dropped down in October and then up again in the first quarter of 2015, which caused our one-year average to exceed the EPA limit. The average HAA5 concentration exceeded the EPA limits for the first time in July 2015.

When will the water be clean again?
As stated in the notice to campus, the campus water is still safe to drink. However, to correct the problem with both high TTHM and HAA5 concentrations UAF has contracted with College Utilities Corporation to provide campus drinking water. By March 1, 2016 the existing campus water distribution system should be connected to the CUC system. The TTHM and HAA5 levels in CUC water are below the EPA maximum limits. UAF will continue to test water for TTHM and HAA5 on a quarterly basis and will report results to the campus community.

Why did you increase the amount of chlorine in the water?
In December 2014 one of the routine tests of the campus water system showed bacteria levels higher than desired. UAF corrected the problem by immediately increasing the system-wide chlorine level from 20 to 25 parts per billion.

Will the university provide alternate drinking water for me?
While the water is safe for drinking now, for those who prefer it, filtered drinking water is available on campus at many locations. Please see the list of available sites at http://www.uaf.edu/fs/departments/utilities/water-plant/.