ME 1, ISSUE 1
VOLUME 1, ISSUE 1
JUNE 2007

2006 Water Quality Report
UAF Utilities
Division of Facilities

Your Water

This report is to inform the on-campus population about the safety and operation of the water facilities on the main campus of the University of Alaska Fairbanks. This is a snapshot of last year’s water quality. Included are details about where your water comes from, what it contains, and how it compares to EPA and state standards.

UAF has two primary drinking water wells and a third emergency well. The wells are drilled to depths of 70 to 90 feet. The primary wells are located in heated, secure buildings with concrete floors. The buildings and pads are elevated to prevent runoff from entering the wells. The wells are located on University property.

Source Water Assessment
The ADEC has compiled a Source Water Assessment of our source of public drinking water. This assessment has defined an area around our wells that is critical to the preservation of the quality of our drinking water. Within this area, they have identified potential and existing sources of contamination. Based on the information gathered, ADEC has determined the overall vulnerability of our wells to contamination. The results are available at the following locations: Rasmuson Library, UAF Power Plant, and the Fairbanks North Star Borough Library.

Inside this issue:
- Contaminant Sources
- Source Water Assessment
- Only Tap Water Delivers

Important Drinking Water Definitions

MCLG: Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG’s allow for a margin of safety.

MCL: Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. MCL’s are set as close to the MCLG’s as feasible using the best available treatment technology.

ppb: parts per billion, one part in one billion parts
ppm: parts per million, one part in one million parts, equivalent to milligrams per liter
ND: Non-detect: sample result was below the lowest method detection limit.
RAA: Running Annual Average: computed quarterly, is the average of the quarterly averages for all samples taken during the previous four calendar quarters.

Japanese
この情報は重要です。読むために保存してください。

Korean
이 정보는 매우 중요합니다. 본인을 위해 번역을 사용하시십시오.

The University of Alaska Fairbanks is an affirmative action/equal opportunity employer and educational institution.

Institution.

Many Drinking Water Definitions

MCLG: Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG’s allow for a margin of safety.

MCL: Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. MCL’s are set as close to the MCLG’s as feasible using the best available treatment technology.

ppb: parts per billion, one part in one billion parts
ppm: parts per million, one part in one million parts, equivalent to milligrams per liter
ND: Non-detect: sample result was below the lowest method detection limit.
RAA: Running Annual Average: computed quarterly, is the average of the quarterly averages for all samples taken during the previous four calendar quarters.

"I have little need to remind you that water has become one of our major national concerns."
Ezra Taft Benson, U.S. Secretary of Agriculture, 1915

2006 Water Quality Report
UAF Utilities
Division of Facilities

Chinese
重要�
水是我们的生活必需品。阅读并保存这个信息。

"I have little need to remind you that water has become one of our major national concerns."
Ezra Taft Benson, U.S. Secretary of Agriculture, 1915

Spanish
Este informe contiene informa-ción muy importante sobre su agua potable. Tradúzcala o intenda bien.

Inside this issue:
- Contaminant Sources
- Source Water Assessment
- Only Tap Water Delivers

Important Drinking Water Definitions

MCLG: Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG’s allow for a margin of safety.

MCL: Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. MCL’s are set as close to the MCLG’s as feasible using the best available treatment technology.

ppb: parts per billion, one part in one billion parts
ppm: parts per million, one part in one million parts, equivalent to milligrams per liter
ND: Non-detect: sample result was below the lowest method detection limit.
RAA: Running Annual Average: computed quarterly, is the average of the quarterly averages for all samples taken during the previous four calendar quarters.

"I have little need to remind you that water has become one of our major national concerns."
Ezra Taft Benson, U.S. Secretary of Agriculture, 1915

Japanese
この情報は重要です。読むために保存してください。

Korean
이 정보는 매우 중요합니다. 본인을 위해 번역을 사용하시십시오.

The University of Alaska Fairbanks is an affirmative action/equal opportunity employer and educational institution.
While your drinking water meets EPA’s standard for arsenic, it does contain low levels of arsenic. EPA’s standard balances the current understanding of arsenic’s possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a known cause of cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems. Arsenic has been a major concern of the University Water Plant for many years. Naturally occurring arsenic is very plentiful in the Fairbanks area. In 2005, the UAF Water Plant was granted reduced monitoring status by the ADEC. Our next sampling event for arsenic is scheduled to take place in the first quarter of 2008. The result of the last sample collected at the water treatment plant was below detectable limits for the test method used by our laboratory. The lowest detectable level for arsenic is 2.5 ppb. This is significant due to the EPA’s lowering of the MCL for arsenic in 2006 to 10 ppb. For comparison purposes, the UAF source water, before treatment, is lower than 4 ppb.

Total Trihalomethanes (TTHM)

Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer. Total Trihalomethanes (TTHM) are a byproduct of chlorinating water that contains natural organics. The ground water used by the University Water Plant has always had these organics, derived, most likely, from decaying plant materials and thus, TTHM’s have always been in the chlorinated water. An EPA survey discovered that trihalomethanes are present in virtually all chlorinated water supplies. In an effort to lower TTHM levels, EPA required large towns and cities to reduce TTHM levels in potable water. However, recent changes in national drinking water quality standards now require that all water treatment systems, regardless of size, reduce TTHM’s. For 2006, the University Water Plant was in compliance for TTHM’s three of the four quarters. We regret to say we did not meet the MCL of 80 ppb in the first quarter of 2006 due to elevated levels of TTHM’s in the last quarter of 2005. Our compliance average for the first quarter of 2006 was 83.2 ppb. (See Figure 1) The UAF Water Plant began to develop a strategic plan in late 2005 in order to reduce TTHM levels within our distribution system. This plan has been a success, as indicated by sample results for the last three quarters of 2006. Increased monitoring, treatment optimization studies, and alternative treatment strategies for the water treatment plant, have tremendously lowered TTHM levels within our system.

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home’s plumbing. If you are concerned about elevated lead levels in your home’s water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from Safe Drinking Water Hotline (800-426-4791). The Division of Utilities performed in three year Lead and Copper testing in December 2004. Results of the ‘04 analysis can be viewed online at www.uaf.edu/s. The next sampling event will be Summer ‘07.

Educational Statement for Lead

Radioactive Contaminants

Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer. The UAF Water Plant complied with the Radionuclide Rule during the ‘05 monitoring event.