DEPARTMENT OF THE AIR FORCE
97th AIR MOBILITY WING
ALTUS AIR FORCE BASE OKLAHOMA

15 December 2013

Dear Altus AFB Community,

Altus Air Force Base routinely monitors for the presence of drinking water contaminants. Results of recent mandatory testing confirm that our drinking water has exceeded the standard for total Trihalomethanes (TTHMs), which is set at 80 parts per billion by the Environmental Protection Agency (EPA). Testing results from 1 Feb – 30 November 13 show that our system exceeds this standard (also called maximum contaminant level) for TTHMs. The level of TTHMs averaged at our system for 1 Feb – 30 November 13 was 162.13 parts per billion.

Despite the elevated TTHM levels, no alternative source or boiling of water is necessary. The EPA has classified this as a Tier 2 violation, indicating that a contaminant level has been exceeded, but there is no immediate risk to human health. Although not required, there are steps you can take to reduce these levels in your own drinking water. The easiest and most cost-effective way to reduce TTHM levels in drinking water is to treat it with an activated charcoal filter labeled for removal of volatile organic carbons known as VOCs. These filters are available for purchase at many local department stores.

As stated previously, the City of Altus is working to complete renovations to the current water treatment system, which will provide Altus Air Force Base with reduced levels of TTHMs. The City of Altus hopes to have all renovations completed by the summer of 2014. Altus Air Force Base hired an engineering firm to help investigate ways that the base can improve this situation. For further guidance and information, please see the attached information sheet. If you have any questions, please contact SSgt Justeen Kincaid at 481-5494 or e-mail Justeen.Kincaid@us.af.mil.

Public Affairs wrote an article discussing water quality and conservation efforts, which can be found at http://www.altus.af.mil/news/story.asp?id=123357309 .

Megan M. Batten
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Bioenvironmental Engineering Element Chief

Attachment:
Trihalomethane Information

Trihalomethane Information

BACKGROUND:

TTHMs are a group of chemicals that are classified as disinfection byproducts (DBPs). DBPs are the result of water treatment, i.e. chlorination, reacting with organic material in the water. The city of Altus receives its water from the Tom Steed Reservoir and treats the water with chlorine. With the historically low water levels and high temperatures, there has been an increase in organic matter in the local water which requires increased amounts of chlorine to treat. As more chlorine is used, more DBPs are formed.

The city of Altus has been required to test for DBPs in drinking water since 1998. In September 2011, the city was assigned a Notice of Violation from the EPA for elevated TTHMs, based on samples that were averaged between July 2010 and June 2011. The city of Altus has been in violation since that time and is required to send notices quarterly to city residents of the violation. The city's treatment system for DBPs is currently offline and is being renovated with an estimated completion date of Summer 2014.

Because Altus AFB receives its water directly from the city of Altus, we have previously not been required to independently test for DBPs. In the past, the base has met all water quality standards that were applicable; however, those standards did not require testing for DBPs. Now, in order to meet new EPA mandates, we began federal compliance testing for TTHMs on Altus AFB in February 2013.

HEALTH RISKS:

It's believed that the health risks associated with TTHM exposure are low, and research is underway to define this better. Experts note that it is difficult to isolate specific health outcomes from TTHMs, as there are other minerals and chemicals present in drinking water.

There are studies, however, that suggest possible adverse health effects from long-term, high-dose exposures to TTHMs. Specifically, exposure to DBPs has been associated with various forms of cancer (including liver, kidney, and bladder). Additionally, chronic, high-dose exposure may lead to problems with the nervous system, liver, kidneys, or heart. Other health effects, including developmental effects, are currently being evaluated. Despite these risks, the dangers of drinking untreated water are more significant than the potential risks of short-term TTHM exposure from the chlorination process.

PERSONAL OPTIONS TO IMPROVE YOUR WATER:

Although the health risks associated with our levels of TTHMs are low, there are steps you can take to reduce these in your own drinking water. The easiest and most cost-effective way to reduce TTHM levels in the drinking water is to treat it with an activated charcoal filter (for example, a Brita faucet-type system). There are many commercial options for these, and they are easy to use. Another more expensive option is to install a reverse osmosis system in your house, which may require landlord approval if you do not own your home.