



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 23D WING (ACC)
MOODY AIR FORCE BASE GEORGIA

1 Jul 15

MEMORANDUM FOR ALL REVIEWING AUTHORITIES

FROM: 23 WG/JA

SUBJECT: Legal Review of 2014 Annual Consumer Report on Moody AFB Drinking Water Quality

1. **FACTS:** On 25 Jun 15, 23 WG/JA received a request to review the 2014 Annual Consumer Report on Moody AFB Drinking Water Quality. Upon review, I find it legally sufficient.

2. **LAW:**

a. The Environmental Protection Agency Safe Drinking Water Act requires community water systems to report water quality information to the consuming public by 1 Jul 15. 40 Code of Federal Regulations §141.151. It provides that a State may adopt alternative requirements for the form and content of the reports. *Id.* at (d). In response, the Georgia Environmental Protection Bureau created a Consumer Confidence Report (CCR) Guidance and Preparation Manual to set forth the requirements and format for the required reports. This Manual requires the following:

- i. The name of the Community Water System (CWS) must be identified, and a primary CCR contact must be included.
- ii. Opportunities for the public to participate in the decision making process as it relates to drinking water quality must be addressed to include committee or board meetings.
- iii. The common name of the source of water delivered through the system.
- iv. The type of water source.
- v. Verbatim definitions must be included of maximum contaminant level, maximum contaminant level goal, maximum residual disinfectant level, and maximum residual disinfectant level goal.
- vi. A detected contaminants table presenting information on all regulated contaminants covered under their drinking water permit.
- vii. Any and all detected contaminants must identify the likely source of that contaminant to the best of the provider's knowledge.
- viii. Any exceedance of drinking water limits must be clearly identified.

- ix. An explanation of contaminants and health risks found in drinking water.
- x. An explanation of the vulnerability of some populations to contaminants.
- xi. Required educational information.

b. Each CWS must mail or deliver a copy of the CCR to each of their customers, either by mail delivery of the report, notification by mail of the report's availability with a direct website link to the CCR, or by email with the CCR attached or containing a direct website link. Systems serving between 500 and 10,000 customers do not have to mail copies of the CCR, but they must publish the CCR in one or more local newspapers serving the area, inform customers that the CCR will not be mailed, and make the CCR available to the public upon request.

c. Additionally, a memorandum dated 11 Feb 08 from Georgia Department of Natural Resources requires that every Consumer Confidence Report after 1 Jul 08 must include lead-specific information.

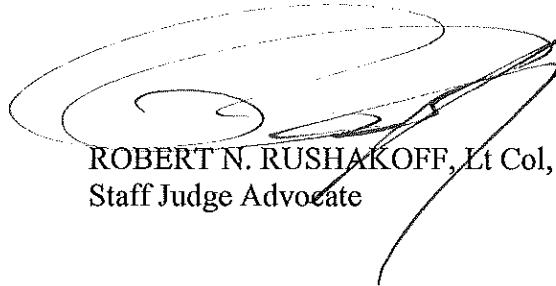
3. **ANALYSIS:** Please include a primary CCR contact in the opening section "Is my water safe?" and please add "For information on committee or board meetings, please contact the Bioenvironmental Engineering Flight at (229) 257-4747." in the "How can I get involved?" section. Subject to implementation of the above recommendations, the proposed Consumer Confidence Report includes all of the required elements under the CCR Guidance and Preparation Manual and is legally sufficient.

4. **RECOMMENDATION:** For the reasons mentioned above we find the proposed 2014 Annual Consumer Report on Moody AFB Drinking Water Quality legally sufficient.



CATHERINE M. KALLEN, Capt, USAF
Assistant Staff Judge Advocate

I concur.



ROBERT N. RUSHAKOFF, Lt Col, USAF
Staff Judge Advocate

Annual Consumer Confidence Report on Moody AFB Drinking Water Quality

Is my water safe?

The Bioenvironmental Engineering Flight of the 23d Medical Group is pleased to report that the Moody AFB community drinking water **is safe** for consumption. Your drinking water met all safety and quality standards set by the State of Georgia and the Environmental Protection Agency (EPA) during 2014. This annual Consumer Confidence Report provides Moody AFB members with a detailed account of all monitoring and testing results gathered from water quality testing during 2014 (and prior years, based on the contaminant). You can contact the Bioenvironmental Engineering Flight at (229) 257-4747 if you have any questions regarding this report

In order to ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. The 23d Medical Group is committed to ensuring the Moody AFB community is continually provided safe, dependable drinking water.

Do I need to take special precautions?

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 for infections. These people should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

Where does my water come from?

The drinking water being delivered to you is pumped from the Floridan Aquifer, a groundwater source and then processed through a nano-filtration treatment system. It then travels through a network of underground pipes known as a distribution system.

Why are there contaminants in my drinking water?

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 can be obtained by calling the EPA'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 can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

(A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

(B) Inorganic contaminants, such as salts and metals, which can occur naturally or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

(C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.

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(D) Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.

(E) Radioactive contaminants (“radionuclides”) may be found in most drinking water systems at very low levels, however they are not considered to be a public concern.

Description of Water Treatment Process

Your water is treated by filtration and disinfection. Filtration removes particles suspended in the source water. Particles typically include clays and silts, natural organic matter, iron and manganese, and microorganisms. Your water is then treated by disinfection. Disinfection involves the addition of chlorine or other disinfectants to kill bacteria and other microorganisms (viruses, cysts, etc.) that may be in the water.

How can I get involved?

Subject to implementation of the above recommendations, the proposed Consumer Confidence Report includes all of the required elements under the CCR Guidance and Preparation Manual and is legally sufficient. If you would like more information on how the drinking water testing process is conducted or information on any potential meetings in regards to the community drinking water, please contact the Bioenvironmental Engineering Flight at (229) 257-4747.

Additional Information for Lead

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and children. Lead in drinking water comes primarily from materials and components associated with service lines and home plumbing. The Moody AFB Water Plant 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. Questions regarding lead, specific to water testing can be answered by Bioenvironmental Engineering at (229) 257-4747. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at <http://www.epa.gov/safewater/lead>.

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Water Quality Data Table

The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year.

<u>Contaminants</u>	<u>MCLG</u> or <u>MRDLG</u>	<u>MCL,</u> <u>TT, or</u> <u>MRDL</u>	<u>Your</u> <u>Water's</u> <u>Range</u>	<u>Sample</u> <u>Date</u>	<u>Violation</u>	<u>Typical Source</u>	
Disinfectants & Disinfectant By-Products							
Haloacetic Acids (HAA5) (ppb)	12	60	1.7 -12	August 2014	No	By-product of drinking water chlorination	
TTHMs [Total Trihalomethanes] (ppb)	16	80	1.1 - 16	August 2014	No	By-product of drinking water disinfection	
Chlorine (as Cl ₂) (ppm)	4	4	0.4 - 2.6	Monthly	No	Water additive used to control microbes	
Inorganic Contaminants							
Fluoride (ppm)	4	4	0.8 - 1.1	Monthly	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories	
Nitrate [measured as Nitrogen] (ppm)	10	10	0.2	July 2014	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits	
Nitrite [measured as Nitrogen] (ppm)	1	1	0.2	July 2014	No		
Microbiological Contaminants							
Total Coliform	0	0	0	Monthly	No	Naturally present in the environment	
Fecal coliform or <i>E. coli</i> bacteria	0	0	0	Monthly	No	Human and animal fecal waste	
A violation occurs when a routine sample and a repeat sample, in any given month, are positive for total coliform, and one is also positive for fecal coliform or <i>E. coli</i> .							
<u>Contaminants</u>	<u>MCLG</u>	<u>AL</u>	<u>Your</u> <u>Water</u>	<u>Sample</u> <u>Date</u>	<u># Samples</u> <u>Exceeding AL</u>	<u>Exceeds</u> <u>AL</u>	<u>Typical Source</u>
Inorganic Contaminants							
Copper - action level at consumer taps (ppm)	1.3	1.3	0	2012	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead - action level at consumer taps (ppb)	0	15	0	2012	0	No	

(1) Lead and copper monitoring is performed by sampling at several locations, then statistically analyzing all the results to determine the 90th percentile value. This value must not exceed the action level

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Unit Descriptions	
Term	Definition
ppm	ppm: parts per million, or milligrams per liter (mg/L)
ppb	ppb: parts per billion, or micrograms per liter (µg/L)
positive samples	positive samples/yr: The number of positive samples taken that year
NA	NA: not applicable
ND	ND: Not detected
NR	NR: Monitoring not required, but recommended.

Important Drinking Water Definitions	
Term	Definition
MCLG	MCLG: Maximum Contaminant Level Goal: 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.
MCL	MCL: Maximum Contaminant Level: 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.
TT	TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
AL	AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Variances and Exemptions	Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
MRDLG	MRDLG: Maximum residual disinfection level goal. 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.
MRDL	MRDL: Maximum residual disinfectant level. 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.
MNR	MNR: Monitored Not Regulated
MPL	MPL: State Assigned Maximum Permissible Level

For more information please contact:

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