

BUREAU OF PUBLIC WATER SUPPLY

CALENDAR YEAR 2010 CONSUMER CONFIDENCE REPORT CERTIFICATION FORM

KEESLER AFB

Public Water Supply Name

240049

List PWS ID #s for all Water Systems Covered by this CCR

The Federal Safe Drinking Water Act requires each *community* public water system to develop and distribute a consumer confidence report (CCR) to its customers each year. Depending on the population served by the public water system, this CCR must be mailed to the customers, published in a newspaper of local circulation, or provided to the customers upon request.

Please Answer the Following Questions Regarding the Consumer Confidence Report

- Customers were informed of availability of CCR by: *(Attach copy of publication, water bill or other)*
- Advertisement in local paper
 - On water bills
 - Other _____

Date customers were informed: ___ / ___ / ___

- CCR was distributed by mail or other direct delivery. Specify other direct delivery methods:

Date Mailed/Distributed: ___ / ___ / ___

- CCR was published in local newspaper. *(Attach copy of published CCR or proof of publication)*

Name of Newspaper: KEESLER NEWS

Date Published: 06/23/11

- CCR was posted in public places. *(Attach list of locations)*

Date Posted: ___ / ___ / ___

- CCR was posted on a publicly accessible internet site at the address: www. _____

CERTIFICATION

I hereby certify that a consumer confidence report (CCR) has been distributed to the customers of this public water system in the form and manner identified above. I further certify that the information included in this CCR is true and correct and is consistent with the water quality monitoring data provided to the public water system officials by the Mississippi State Department of Health, Bureau of Public Water Supply.

HAROLD KING P. TAMONDONG, SrA

Name/Title (President, Mayor, Owner, etc.)

7/1/11

Date

Mail Completed Form to: Bureau of Public Water Supply/P.O. Box 1700/Jackson, MS 39215
Phone: 601-576-7518

Keesler Air Force Base

Consumer Confidence Report 2010

Spanish (Español)

Este informe contiene información muy importante sobre la calidad de su agua potable. Por favor lea este informe o comuníquese con alguien que pueda traducir la información.

Is my water safe?

We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is a snapshot of last year's water quality. We are committed to providing you with information because informed customers are our best allies.

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 from 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?

Keesler AFB's drinking water is pumped from the Lower Graham Ferry Aquifer; a groundwater source. All water provided to Keesler is pumped from wells located on base property. The water from the wells is mixed, treated with chlorine and fluoride, stored, and distributed.

Source water assessment and its availability

The purpose of a source water assessment is to determine the quality of the raw water used for drinking water. At Keesler, the only treatment performed on source water is the addition of chlorine and fluoride. Because of the limited chemical treatment, the analytical results for Keesler's drinking water are representative of its source water.

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 Environmental Protection Agency's (EPA) 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. Examples of these contaminants include microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife; inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, or farming; pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses; 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 stormwater runoff, and septic systems; and radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities. In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

How can I get involved?

Education is the key to getting involved and understanding your drinking water. Additional information is available from Center for Disease Control viewable on the web at <http://www.cdc.gov/safewater/>

Description of Water Treatment Process

Your water is treated by disinfection. Disinfection involves the addition of chlorine disinfectant to kill dangerous bacteria and micro-organisms that may be in the water. Disinfection is considered to be one of the major public health advances of the 20th century.

Water Conservation Tips

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference – try one today and soon it will become second nature.

- Take short showers - a 5 minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- Shut off water while brushing your teeth, washing your hair and shaving and save up to 500 gallons a month.
- Use a water-efficient showerhead. They're inexpensive, easy to install, and can save you up to 750 gallons a month.
- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- Water plants only when necessary.
- Fix leaky toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.
- Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.
- Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill!
- Visit www.epa.gov/watersense for more information.

Cross Connection Control Survey

The purpose of this survey is to determine whether a cross-connection may exist at your home or business. A cross connection is an unprotected or improper connection to a public water distribution system that may cause contamination or pollution to enter the system. We are responsible for enforcing cross-connection control regulations and insuring that no contaminants can, under any flow conditions, enter the distribution system. If you have any of the devices listed below please contact us so that we can discuss the issue, and if needed, survey your connection and assist you in isolating it if that is necessary.

- Boiler/ Radiant heater (water heaters not included)
- Underground lawn sprinkler system
- Pool or hot tub (whirlpool tubs not included)
- Additional source(s) of water on the property
- Decorative pond
- Watering trough

Source Water Protection Tips

Protection of drinking water is everyone's responsibility. You can help protect your community's drinking water source in several ways:

- Eliminate excess use of lawn and garden fertilizers and pesticides – they contain hazardous chemicals that can reach your drinking water source.
- Pick up after your pets.
- Dispose of chemicals properly; take used motor oil to a recycling center.
- Organize a storm drain stenciling project with your local government or water supplier. Stencil a message next to the street drain reminding people "Dump No Waste - Drains to River" or "Protect Your Water." Produce and distribute a flyer for households to remind residents that storm drains dump directly into your local water body.

Other Information

To comply with the "Regulation Governing Fluoridation of Community Water Supplies", Keesler Air Force Base is required to report certain results pertaining to fluoridation of our water system. The number of months in the previous calendar year that average fluoride sample results were within the optimal range of 0.7-1.3 ppm was 11. The percentage of fluoride samples collected in the previous calendar year that was within the optimal range of 0.7-1.3 ppm was 61%.

Significant Deficiencies

Failure to maintain correct 4-Log disinfection residual. The duration of the violation is from 7/26/2010 to 7/31/2010. The corrective action taken by Keesler AFB included increased disinfection and increased monitoring of disinfection residuals.

Additional Information for Lead

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Keesler AFB (PWS ID#240049) 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. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

Water Quality Data Table

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of contaminants in water provided by public water systems. The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. Although many more contaminants were tested, only those substances listed below were found in your water. All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased protection of public health. A few naturally occurring minerals may actually improve the taste of drinking water and have nutritional value at low levels. 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, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than one year old. In this table you will find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have provided the definitions below the table.

<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</u>	<u>Range</u> <u>Low</u> <u>High</u>		<u>Sample</u> <u>Date</u>	<u>Violation</u>	<u>Typical Source</u>
Disinfectants & Disinfectant By-Products								
(There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants)								
Chlorine (as Cl ₂) (ppm)	4	4	1.16	0.85	1.16	2010	No	Water additive used to control microbes
Inorganic Contaminants								
Fluoride (ppm)	4	4	1.1	0.49	1.1	2010	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
<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								
Lead - action level at consumer taps (ppb)	0	15	3	2010	0	No	Corrosion of household plumbing systems; Erosion of natural deposits.	
Copper - action level at consumer taps (ppm)	1.3	1.3	0.1	2010	0	No	Corrosion of household plumbing systems; Erosion of natural deposits	

Undetected Contaminants

The following contaminants were monitored for, but not detected, in your water.

<u>Contaminants</u>	<u>MCLG or MRDLG</u>	<u>MCL or MRDL</u>	<u>Your Water</u>	<u>Violation</u>	<u>Typical Source</u>
cis-1,2-Dichloroethylene (ppb)	70	70	ND	No	Discharge from industrial chemical factories
Xylenes (ppm)	10	10	ND	No	Discharge from petroleum factories; Discharge from chemical factories
Dichloromethane (ppb)	0	5	ND	No	Discharge from pharmaceutical and chemical factories
o-Dichlorobenzene (ppb)	600	600	ND	No	Discharge from industrial chemical factories
p-Dichlorobenzene (ppb)	75	75	ND	No	Discharge from industrial chemical factories
1,1-Dichloroethylene (ppb)	7	7	ND	No	Discharge from industrial chemical factories
trans-1,2-Dichloroethylene (ppb)	100	100	ND	No	Discharge from industrial chemical factories
1,1,1-Trichloroethane (ppb)	200	200	ND	No	Discharge from metal degreasing sites and other factories
Carbon Tetrachloride (ppb)	0	5	ND	No	Discharge from chemical plants and other industrial activities
1,2-Dichloropropane (ppb)	0	5	ND	No	Discharge from industrial chemical factories
Trichloroethylene (ppb)	0	5	ND	No	Discharge from metal degreasing sites and other factories
1,1,2-Trichloroethane (ppb)	3	5	ND	No	Discharge from industrial chemical factories
Tetrachloroethylene (ppb)	0	5	ND	No	Discharge from factories and dry cleaners
Chlorobenzene (monochlorobenzene) (ppb)	100	100	ND	No	Discharge from chemical and agricultural chemical factories
Benzene (ppb)	0	5	ND	No	Discharge from factories; Leaching from gas storage tanks and landfills
Toluene (ppm)	1	1	ND	No	Discharge from petroleum factories
Ethylbenzene (ppb)	700	700	ND	No	Discharge from petroleum refineries
Styrene (ppb)	100	100	ND	No	Discharge from rubber and plastic factories; Leaching from landfills
Nitrate [measured as Nitrogen] (ppm)	10	10	ND	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Nitrite [measured as Nitrogen] (ppm)	1	1	ND	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
1,2,4-Trichlorobenzene (ppb)	70	70	ND	No	Discharge from textile-finishing factories

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)
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

<u>TT Violation</u>	<u>Explanation</u>	<u>Length</u>	<u>Steps Taken to Correct the Violation</u>	<u>Health Effects Language</u>
Ground Water Rule violations	Failure to maintain correct 4-Log disinfection residual.	7/26/2010 to 7/31/2010	The system has increased disinfection and has increased monitoring of the disinfection residuals.	Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites, which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

For more information please contact:

Bioenvironmental Engineering; 81 AMDS/SGPB
301 Fisher St Keesler AFB, MS 39534
Phone: 228-376-0590 Fax: 228-376-0197 E-mail: 81amds.bio@us.af.mil

Keesler's annual water quality report released

Dr. Asprey, Medicine Squadron

Is my water safe?

We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act. This report is designed to provide details about how your water comes from where it comes and how it compares to standards set by regulatory agencies. This report is a snapshot of last year's water quality. We are committed to providing you with information because informed customers are our best allies.

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

Where does my water come from?

Keesler drinking water is pumped from the Lower Gumball Springs Aquifer, a groundwater source. All water provided to Keesler is pumped from wells located on this property. The water from the wells is treated with chlorine and fluoride, stored and distributed.

Source water assessment and availability

The purpose of a source water assessment is to determine the quality of the raw water used for drinking water. At Keesler, the only treatment performed on source water is the addition of chlorine and fluoride. Because of limited chemical treatment, the analytical results for Keesler's drinking water are representative of its source water.

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 Environmental Protection Agency's Safe Drinking Water Hotline: 1-800-426-4791.

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. Examples of these contaminants

include microbial contaminants, such as viruses and bacteria, that may come from septic treatment plants, septic systems, agricultural livestock operations, and wildlife. Inorganic contaminants such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial or domestic waste water discharges, oil and gas production, mining or farming, pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff and residential uses, 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, and radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities. In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

How can I get involved?

Protection is the key to getting involved and understanding your drinking water. Additional information is available from the Centers for Disease Control at <http://www.cdc.gov/healthywater>.

Description of water treatment process

Your water is treated by disinfection. Disinfection involves the addition of chlorine disinfectant to kill dangerous bacteria and microorganisms that may be in the water. Disinfection is considered to be one of the major public health advances of the 20th century.

Water conservation tips

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference — by one today and soon it will become second nature.

Take short showers. A five-minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.

Shut off water while brushing your teeth, washing your hair and shaving and save up to 500 gallons a month.

Use a water-efficient showerhead. They're inexpensive, easy to install, and can save you up to 750 gallons a month.

Run your clothes washer and dishwasher only when they are full. For a save up to 1,000 gallons a month.

Water plants only when necessary. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and watch. If it seeps into the toilet bowl without flushing, you have a leak. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.

Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.

Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce water bills.

For more information, log on to www.epa.gov/watersense.

Cross-connection control survey

The purpose of this survey is to determine whether a cross-connection may exist at your home or business. A cross-connection is an unauthorized or improper connection to a public water distribution system that may cause contamination or pollution to enter the system. We are responsible for enforcing cross-connection control regulations and ensuring that no contaminants can, under any flow conditions, enter the distribution system. If you have any of the devices listed below please contact us so that we can discuss the issue, and if needed, survey your connection and assist you in isolating it if that is necessary.

Barometric heater (water heaters not included)

Underground lawn sprinkler system

Pool or hot tub (whirlpool tubs not included)

Additional source(s) of water on the property

Decorative pond

Wetland trough

Source water protection tips

You can help protect your community's drinking water source in several ways.

Eliminate excess use of lawn and garden fertilizers and pesticides — they contain hazardous chemicals that can reach your drinking water source.

Pick up after your pets.

Dispose of chemicals properly, take used motor oil to a recycling center.

Organize a storm drain cleaning project with your local government or water supplier. Send a message next to the street drain reminding people "Dump No Waste!!" Drains to River or "Protect Your Water."

Produce and distribute a flyer for households to remind residents that storm drains dump directly into your local water body.

Other information

To comply with the "Regulation Governing Fluoridation of Community Water Supplies," Keesler must report certain results pertaining to fluoridation of our water system. The number of months in the previous calendar year that average fluoride sample results were within the optimal range of 0.7-1.3 ppm was 11. The percentage of fluoride samples collected in the previous calendar year that were within the optimal range of 0.7-1.3 ppm was 61 percent.

Please see [Water Quality Page 26](#)

