



**DEPARTMENT OF THE AIR FORCE
502D AIR BASE WING
JOINT BASE SAN ANTONIO**



MEMORANDUM FOR ALL JBSA DRINKING WATER CUSTOMERS

23 Jun 2017

FROM: 502 ABW/CC
2080 Wilson Way
JBSA Ft Sam Houston Texas 78234-7680

SUBJECT: Cover Letter for 2016 JBSA-Fort Sam Houston Consumer Confidence Report
(PWS ID Number: 0150116)

1. The Consumer Confidence Report (CCR), also known as the Annual Water Quality Report, is required annually by the EPA Consumer Confidence Rule. The rule requires public water suppliers that serve the same people year round to provide the customers with the CCR by 1 July of each year. The CCR summarizes information regarding sources used (i.e., rivers, lakes, reservoirs, or aquifers) any detected contaminants, compliance and educational information. Specifically, your report lists what sources are used for your drinking water, what contaminants were detected during testing compared to allowable limits, and descriptions of any drinking water violations enforced by the Texas Commission on Environmental Quality during calendar year 2016.
2. There were no water quality violations for 2016. Your water is safe to drink and meets all regulations for public water systems. The water system did receive three monitoring frequency violations for 2016. All contaminant and violation details are included in the attached report.
3. If you have any questions or concerns, please visit the EPA website below or contact the Joint Base San Antonio – Lackland Bioenvironmental Engineering office at 210-671-7061 for assistance. <http://water.epa.gov/lawsregs/rulesregs/sdwa/ccr/index.cfm>

Heather Pringle

HEATHER L. PRINGLE
Brigadier General, USAF
Commander

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IMPORTANT INFORMATION

For more information about your sources of water, please refer to the Source Water Assessment Viewer available at the following URL:
<http://www.tceq.texas.gov/gis/swaview>

The purpose of this document is to provide most of the data that you will use for your annual Consumer Confidence Report (CCR) for your water system. The report below is not your Consumer Confidence Report. In order to meet all of the requirements of Title 30, Texas Administrative Code (30 TAC), Chapter 290, Subchapter H Consumer Confidence Reports, you must follow the instructions below and review 30 TAC 290.272 Content of the Report to ensure your CCR contains all required information.

To download the data into your word processing program, follow these steps. Remember you must have the document set up in Landscape Orientation.

- * Choose Edit from the Menu.
- * Choose Select All from the edit drop down MENU. (it will highlight all the information)
- * Choose Edit from the Menu, select Copy from the edit dropdown Menu.
- * Open your word processing program.
- * Choose Edit from the MENU, select Paste from the edit dropdown MENU and the information will transfer.
- * You are required to review the data generated in this report to ensure that it is correct and consistent with the compliance monitoring data previously submitted to TCEQ.
- * You must deliver the CCR to your customers by July 1 of every year.
- * All water systems must fill out the Certification of Delivery and mail the original Certification of Delivery and the Consumer Confidence Report to TCEQ by July 1:
 - If sending by regular mail - TCEQ, PDWS MC-155 Attn CCR, PO BOX 13087, Austin, TX 78711-3087
 - If sending by certified mail - TCEQ, PDWS MC-155 Attn CCR, 12100 Park 35 Circle, Austin, TX 78753
- * Systems with 500 customers or fewer are not required to direct deliver the CCR to customers. Instead they must provide notice by July 1 to customers by mail, door-to-door delivery, or posting in an appropriate location that the report is available upon request.
- * The report must include the telephone number of the owner, operator, or designee of the community water system as a source of additional information concerning the report.
- * In communities with a large proportion of non-English speaking residents, as determined by TCEQ, the report must contain information in the appropriate language(s) regarding the importance of the report or contains a telephone number or address where such residents may contact the system to obtain a translated copy of the report and/or assistance in the appropriate language.

* The report must include information about opportunities for public participation in decisions that may affect the quality of the water (e.g., time and place of regularly scheduled board meetings).

* Water systems must look up the current Source Water Assessment status in DWW by clicking on "Source Water Assessment Results" from the Water System Detail page and add one of the following four paragraphs into the CCR. Where the text [insert name of person to contact] is displayed, you must replace it with contact information from your water system.

i. If at least one contaminant listed as highly susceptible, use this text:

The TCEQ completed an assessment of your source water and results indicate that some of your sources are susceptible to certain contaminants. The sampling requirements for your water system are based on this susceptibility and previous sample data. Any detections of these contaminants may be found in this Consumer Confident Report. For more information on source water assessments and protection efforts at our system, contact [insert name of person to contact]

ii. If no contaminants listed as highly susceptible, use this text:

The TCEQ completed an assessment of your source water and results indicate that our sources have a low susceptibility to contaminants. The sampling requirements for your water system are based on this susceptibility and previous sample data. Any detections of these contaminants may be found in this Consumer Confident Report. For more information on source water assessments and protection efforts at our system, contact [insert name of person to contact]

iii. If there are no source water assessment results available for the system, use this text:

A Source Water Assessment for your drinking water source(s) is currently being conducted by the TCEQ and should be provided to us this year. The report will describe the susceptibility and types of constituents that may come into contact with your drinking water source based on human activities and natural conditions. The information in this assessment will allow us to focus our source water protection strategies.

iv. If only sources of water are purchased, use this text:

The TCEQ has completed a Source Water Assessment for all drinking water systems that own their sources. The report describes the susceptibility and types of constituents that may come into contact with your drinking water source based on human activities and natural conditions. The system(s) from which we purchase our water received the assessment report. For more information on source water assessments and protection efforts at our system, contact [insert name of person to contact]

* If your water system is operating under a variance or exemption from the Safe Drinking Water Act granted under Section 290.102(b) (4) of Title 30 of the Texas Administrative Code, you must include the following:

1. Explanation of the variance or exemption;
2. Date the variance or exemption was issued expires;
3. Brief explanation about the steps the system is taking to comply with the term and schedules of the variance or exemption; and
4. Notice of any opportunity for public input on the review or renewal of the variance or exemption.

* You must include any commonly used name and location of the body(ies) of water where your system obtains its water. You can include this on the Source

Water Information page on the space under Location.

- * If your water system receives water from a source that is not your own, you are required to include the current CCR year's Regulated Contaminants Detected table. The providing system is required to give you this information by April 1 of every year. This data should include things like SOC, MIN, MTL, VOC, 1052, 504, 515, 531. Because you cannot test these sources of water the providing system is required to give them to you. Systems that use an interconnect or emergency source to augment the drinking water supply during the calendar year must also include the source of water, length of time used, explanation why it was used, and whom to call for water quality information.
- * If your water system had any violations during the current CCR Calendar year, you are required to include an explanation of the corrective action take by the water system.
- * If your water system is going to use the CCR to deliver a Public Notification, you must include the full public notice and return a copy of the CCR and Public Notice with the Public Notice Certification Form. This is in addition to the copy and certification form required by the CCR Rule.
- * The information about likely sources of contamination provided in the CCR is generic. Specific information regarding contaminants may be available in sanitary surveys and source water assessments and should be used when available to the system.
- * If a community water system distributes water to its customers from multiple hydraulically independent distribution systems fed by different raw water sources, the table should contain a separate column for each service area, and the report should identify each separate distribution system. Alternatively, systems may produce separate reports tailored to include data for each service area.
- * If a water system has performed any monitoring for Cryptosporidium, the report must include: (1) A summary of the results of any detections; and (2) An explanation of the significance of the results.
- * For detected unregulated contaminants for which monitoring is required the table(s) must contain the average and range of concentrations at which the contaminant was detected. The CCR only needs to include detections that were found during the year the report covers. If there are detections the report must include the following explanation: "Unregulated contaminants are those for which the EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulations are warranted."
- * If you used chlorine, chloramine, chlorine dioxide or ozone in your water system you must include: (1) The chemical used, (2) Average level of quarterly data, (3) lowest result of a single sample, (4) Highest result of a single sample, (5) Maximum residual disinfectant level (MRDL), (6) Maximum residual disinfectant level goal (MRDLG), (7) The unit of measure and (8) Source of the chemical.
- * If a water system has performed any monitoring for radon in the finished water, the report must include: (1) The results of the monitoring; and (2) An explanation of the significance of the results.
- * If a water system has performed additional monitoring which indicates the presence of other contaminants in the finished water, TCEQ strongly encourages systems to report any results which may indicate a health concern. To determine if results may indicate a health concern, TCEQ recommends that systems find out if EPA has proposed a National Primary Drinking Water Regulation or issued a health advisory for that contaminant by calling the Safe Drinking Water Hotline (800-426-4791). TCEQ considers detects above a proposed MCL or health advisory level to indicate possible health concerns. For such contaminants, TCEQ recommends that the report include: (1) The results of the monitoring; and (2) an explanation of the significance of the results noting the existence of a health advisory or a proposed regulation.

* If your system received a fecal-indicator positive ground water source sample, you must inform your customers by including the following information in the CCR:

1. The source of fecal contamination (if the source is known) and the dates of the fecal indicator-positive;
2. Actions taken to address the fecal contamination in the groundwater source;
3. For each fecal contamination that has not been addressed the plan approved by TCEQ and schedule for correction; and
4. The potential health affects using language in sec290.275(3)

* If you are a groundwater system that receives notice from a state of a significant deficiency, you must inform your customers in your CCR report of any significant deficiencies that are not corrected by December 31 of the year covered by it. The CCR must include the following information:

1. The nature of the significant deficiency and the date it was identified by the state.
2. Include information regarding the State-approved plan and schedule for correction, including interim measures, progress to date, and any interim measures completed.
3. If the significant deficiency was corrected by the end of the calendar year, include information regarding how the deficiency was corrected and the date it was corrected.

Annual Drinking Water Quality Report

TX0150116

FORT SAM HOUSTON

Annual Water Quality Report for the period of January 1 to December 31, 2016

This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water.

For more information regarding this report contact:

Name _____

Phone _____

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (____)____-____.

FORT SAM HOUSTON is Ground Water

Sources of Drinking Water

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.

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 at (800) 426-4791.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which 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 storm water 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 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.

- 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 which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Contaminants may be found in drinking water that may cause taste, color, or odor problems. These types of problems are not necessarily causes for health concerns. For more information on taste, odor, or color of drinking water, please contact the system's business office.

You may be more vulnerable than the general population to certain microbial contaminants, such as *Cryptosporidium*, in drinking water. Infants, some elderly, or immunocompromised persons such as those undergoing chemotherapy for cancer; persons who have undergone organ transplants; those who are undergoing treatment with steroids; and people with HIV/AIDS or other immune system disorders, can be particularly at risk from infections. You should seek advice about drinking water from your physician or health care providers. Additional guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* are available from the Safe Drinking Water Hotline (800-426-4791).

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. We are responsible for providing high quality drinking water, but we 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>.

Information about Source Water Assessments

The TCEQ completed an assessment of your source water and results indicated that some of your sources are susceptible to certain contaminants. The sampling requirements for your water system are based on this susceptibility and previous sample data. Any detection of these contaminants may be found in this Consumer Confidence Report. For more information on source water assessments and protection efforts at our system, contact Christopher Robins 671-7061.

For more information about your sources of water, please refer to the Source Water Assessment Viewer available at the following URL:
<http://gis3.tceq.state.tx.us/swaview>

Further details about sources and source-water assessments are available in Drinking Water Watch at the following URL: <http://dww2.tceq.texas.gov/DWW/>

Source Water Name	Type of Water	Report Status	Location
1 - BLDG 2194	BLDG 2194 GW	Y	_____
5 - BLDG 3186	BLDG 3186 GW	_____	_____
6 - BLDG 3186	BLDG 3186 GW	_____	_____
8 - BLDG 3319	GW	_____	_____

2016 Regulated Contaminants Detected

Lead and Copper

Definitions:

Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.

Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2016	1.3	1.3	0.13	1	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2016	0	15	5.4	1	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

Water Quality Test Results

- Definitions: The following tables contain scientific terms and measures, some of which may require explanation.
- Avg: Regulatory compliance with some MCLs are based on running annual average of monthly samples.
- Maximum Contaminant Level or MCL: 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.
- Level 1 Assessment: A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.
- Maximum Contaminant Level Goal or MCLG: 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.
- Level 2 Assessment: A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.
- Maximum residual disinfectant level or MRDL: 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.
- Maximum residual disinfectant level goal or MRDLG: 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.
- MFL: million fibers per liter (a measure of asbestos)
- na: not applicable.

Water Quality Test Results

mrem:	millirems per year (a measure of radiation absorbed by the body)
NTU	nephelometric turbidity units (a measure of turbidity)
pCi/L	picocuries per liter (a measure of radioactivity)
ppb:	micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.
ppm:	milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.
Treatment Technique or TT:	A required process intended to reduce the level of a contaminant in drinking water.
ppt	parts per trillion, or nanograms per liter (ng/L)
ppq	parts per quadrillion, or picograms per liter (pg/L)

Regulated Contaminants

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorite	2016	0.57	0.19 - 0.57	0.8	1	ppm	N	By-product of drinking water disinfection.
Haloacetic Acids (HAA5)	2016	2	0 - 2	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2016	2	0 - 7.2	No goal for the total	80	ppb	N	By-product of drinking water disinfection.
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	2016	0.0507	0.0507 - 0.0507	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	2016	0.2	0.18 - 0.18	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate [measured as Nitrogen]	2016	2	2.08 - 2.15	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Combined Radium 226/228	06/22/2011	1	1 - 1	0	5	pCi/L	N	Erosion of natural deposits.

Violations Table

Chlorine Dioxide			
Some infants and young children who drink water containing chlorine dioxide in excess of the MRDL could experience nervous system effects. Similar effects may occur in fetuses of pregnant women who drink water containing chlorine dioxide in excess of the MRDL. Some people may experience anemia.			
Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, (DBP) (CHL. DIOXIDE)	01/01/2016	01/31/2016	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.
MONITORING, (DBP) (CHL. DIOXIDE)	02/01/2016	02/29/2016	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.
MONITORING, (DBP) (CHL. DIOXIDE)	03/01/2016	03/31/2016	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.
MONITORING, (DBP) (CHL. DIOXIDE)	04/01/2016	04/30/2016	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.
MONITORING, (DBP) (CHL. DIOXIDE)	05/01/2016	05/31/2016	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.
MONITORING, (DBP) (CHL. DIOXIDE)	06/01/2016	06/30/2016	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.
MONITORING, (DBP) (CHL. DIOXIDE)	07/01/2016	07/31/2016	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

Chlorite			
Some infants and young children who drink water containing chlorite in excess of the MCL could experience nervous system effects. Similar effects may occur in fetuses of pregnant women who drink water containing chlorite in excess of the MCL. Some people may experience anemia.			
Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE (DBP), MAJOR	01/01/2016	01/31/2016	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.
MONITORING, ROUTINE (DBP), MAJOR	02/01/2016	02/29/2016	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.
MONITORING, ROUTINE (DBP), MAJOR	03/01/2016	03/31/2016	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.
MONITORING, ROUTINE (DBP), MAJOR	04/01/2016	04/30/2016	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.
MONITORING, ROUTINE (DBP), MAJOR	05/01/2016	05/31/2016	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.
MONITORING, ROUTINE (DBP), MAJOR	06/01/2016	06/30/2016	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

Violations Table

MONITORING, ROUTINE (DBP), MAJOR	07/01/2016	07/31/2016	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.
MONITORING, ROUTINE (DBP), MAJOR	12/01/2016	12/31/2016	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

Lead and Copper Rule

The Lead and Copper Rule protects public health by minimizing lead and copper levels in drinking water, primarily by reducing water corrosivity. Lead and copper enter drinking water mainly from corrosion of lead and copper containing plumbing materials.

Violation Type	Violation Begin	Violation End	Violation Explanation
FOLLOW-UP OR ROUTINE TAP M/R (LCR)	10/01/2016	2016	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.