

CONSUMER CONFIDENCE REPORT

TCEQ CERTIFICATION of DELIVERY

For Calendar year 2016

Public Water System(PWS) Name : CITY OF ALPINE

PWS ID Number : TX0220001

I certify that the community water system named above has distributed the Consumer Confidence Report (CCR) for the calendar year of 2016 and that the information in the report is correct and consistent with the compliance monitoring data previously submitted to the TCEQ. Public Water Systems **servicing 500 or fewer persons** are not required to mail the entire CCR to their customers as long as the system provides notice at least once per year by July 1 to its customers by mail, door-to-door delivery, or by posting in an appropriate location that the report is available upon request.

Date of Delivery: 7/ 3/ 2017
 Certified By: Name (print): J. Horry
 Title: Assistant City Manager
 Phone Number: (432) 837-3281 Email: j.horry@ci.alpine.tx.us

Signature: _____ Date: 7 / 3 / 2017

Direct delivery methods-You must use at least one direct delivery method (check all that apply):

- Mail a paper copy of the CCR
 - Electronic Delivery:**
 - Mail notification that CCR is available on-line at [http:// cityofalpine.com/wpcontent/uploads/2016/Consumer-Confidence-Report.pdf](http://cityofalpine.com/wpcontent/uploads/2016/Consumer-Confidence-Report.pdf)
 - Email direct web address of the CCR, available at [http://](http:// cityofalpine.com/wpcontent/uploads/2016/Consumer-Confidence-Report.pdf) _____
 - Email CCR as an attachment to an email.
 - Email CCR as an embedded image in an email.
 - Other direct delivery (for example, door hangers or additional electronic delivery method).
- Please specify: _____

Good-faith delivery methods -To reach people who do not receive bills (check all that apply):

- Posting the CCR on the Internet at [http:// cityofalpine.com/wpcontent/uploads/2015/012016-Consumer-Confidence-Report.pdf](http://cityofalpine.com/wpcontent/uploads/2015/012016-Consumer-Confidence-Report.pdf)
- Mailing the CCR to people who receive mail, but who do not receive bills.
- Advertising the availability of the CCR in news media.
- Posting the CCR in public places.
- Delivering multiple copies to single billing addresses serving multiple persons.
- Delivering multiple copies of the CCR to community organizations.

*Systems serving 100,000 or more people are required to post the CCR on a publicly available web site and provide the URL here: <http://> _____

All systems are required to mail by July 1 the certification of delivery and complete Consumer Confidence Report to: TCEQ recommends the use of certified mail.

Sending by certified mail:	Sending by regular mail:
TCEQ PDW, MC-155, Attn: CCR, 12100 Park 35 Circle Austin, TX 78753	TCEQ PDW, MC-155, Attn: CCR, PO Box 13087 Austin, TX 78711-3087

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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/swview>

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

TX0220001

CITY OF ALPINE

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 J. Horry

Phone (432) 837-3281

CITY OF ALPINE is Ground Water

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (432) 837-3281.

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 EPAs 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

A Source Water Susceptibility Assessment for your drinking water source(s) is currently being updated by the Texas Commission on Environmental Quality. This information 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 information contained in the assessment allows us to focus source water protection strategies.

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/swav/Controller/index.jsp?wtrsrc=>

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

Source Water Name	Type of Water	Report Status	Location
EAST WELL / AT EAST PUMPHOUSE	GW	Active	At East Pump house
GARDENER / SUNNY GLEN FIELD	GW	Active	Sunny Glen Field
LOWER SOUTH HILL / CITY YARD	GW	Active	City Yard
MUSQUIZ 10	GW	Active	Musquiz
MUSQUIZ 11	GW	Active	Musquiz
MUSQUIZ 6	GW	Active	Musquiz
MUSQUIZ 7	GW	Active	Musquiz
RAILROAD WELL / HWY 118	GW	Non-Active	Hwy 118
ROBERTS 3 / SUNNY GLEN FIELD	GW	Active	Sunny Glen Field
ROBERTS 4 / SUNNY GLEN FIELD	GW	Active	Sunny Glen Field
ROBERTS 5 / SUNNY GLEN FIELD	GW	Active	Sunny Glen Field
TERRY 2 / SUNNY GLEN FIELD	GW	Active	Sunny Glen Field
UPPER SOUTH HILL / CITY YARD	GW	Active	City Yard

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	0.18	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems
Lead	2016	0	15	2.3	0	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
Total Trihalomethanes (TTHM)	2016	16	15.9 - 15.9	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
Asbestos	06/19/2012	1.878	0 - 1.878	7	7	MFL	N	Decay of asbestos cement water mains; Erosion of natural deposits.
Barium	2016	0.0038	0.0038 - 0.0038	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Chromium	2016	1.4	1.4 - 1.4	100	100	ppb	N	Discharge from steel and pulp mills; Erosion of natural deposits.
Fluoride	07/29/2014	2.76	1.16 - 2.76	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	3	0.636 - 2.79	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
Gross alpha excluding radon and uranium	2016	6.9	3 - 6.9	0	15	pCi/L	N	Erosion of natural deposits.
Uranium	2016	3.2	2.7 - 3.2	0	30	ug/l	N	Erosion of natural deposits.

Violations Table

Chlorine			
Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.			
Violation Type	Violation Begin	Violation End	Violation Explanation
Disinfectant Level Quarterly Operating Report (DLQOR).	10/01/2016	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.

Consumer Confidence Rule			
The Consumer Confidence Rule requires community water systems to prepare and provide to their customers annual consumer confidence reports on the quality of the water delivered by the systems.			
Violation Type	Violation Begin	Violation End	Violation Explanation
CCR ADEQUACY/AVAILABILITY/CONTENT	07/01/2016	2016	We failed to provide to you, our drinking water customers, an annual report that adequately informed you about the quality of our drinking water and the risks from exposure to contaminants detected in our drinking water.

Revised Total Coliform Rule (RTCR)			
E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children, the elderly, and people with severely-compromised immune systems.			
Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE, MINOR (RTCR)	06/01/2016	06/30/2016	We failed to collect some of the required routine samples of 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, MINOR (RTCR)	07/01/2016	07/31/2016	We failed to collect some of the required routine samples of 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.