# **<u>CERTIFICATION of DELIVERY</u>** CONSUMER CONFIDENCE REPORT

For Calendar year 2011

#### **Public Water System(PWS) Name :** SAWS OAKLAND ESTATES **PWS Id Number :** TX0460166

I certify that the community water system named above has distributed the Consumer Confidence Report (CCR) for the calendar year of **2011** by mail or direct delivery to bill-paying customers. I certify that the above system has additionally made an adequate good faith effort to reach non bill-paying consumers by the appropriate methods indicated below. I certify that the report has been made available to non-English-speaking customers. Further, I certify that the information contained in the report is correct and consistent with the compliance monitoring data previously submitted to TCEQ.

Date of Delivery:		
Certified by:	Name (print)	
	Title	
		Date
	Signature	
Check all items tha		e at least one direct delivery method
Our CCR	was distributed by mail or other	direct delivery(such as doorknob hangers).
Specify ot	her delivery methods:	
Check all items that	<u>t apply.</u> Use at least one good	faith method to reach people who do not get bills.
"Good fai	th" efforts were used to reach no	on-bill paying consumers.
Those efforts incl	uded the following (check the	method(s) that you used) :
Posting the	CCR on the Internet at www.	
Mailing the	CCR to people who get mail w	ithin the service area, but who do not pay water bills
Advertising	g the availability of the CCR in r	news media
Publishing	of CCR in local newspaper	
Posting the	CCR in public places	
Delivering	multiple copies to single bill add	dress serving several persons
Delivering	multiple copies to community o	rganizations
Systems serving 1 Internet site addre		st your CCR on a publicly-accessible
www		(other systems are encouraged to provide this)
Mail and postma	ark by July 1 (we recomm	nend but do not require certified mail)
• This comple	ated and signed forms and	
•	eted and signed form; and ted Consumer Confidence Re	port that you sent to your customers:
•	<b>FO: Texas Commission on</b>	· · ·
	PDWS - Mail Code 15	
	12100 Park 35 Circle	
	Austin, Texas 78753	
(Alternate Addre	ss: TCEQ/PDW, MC-155, Attn	: CCR,PO Box 13087, Austin TX 78711-3087)

# 2011 Annual Drinking

## Water Quality Report

(Consumer Confidence Report)

SAWS OAKLAND ESTATES

Phone Number 210-233 -2318

## SPECIAL NOTICE Required language for ALL community public water supplies:

You may be more vulnerable than the general population to certain microbial contaminants, such as Cryptosporidium, in drinking water. Infants, some elderly or immunocompromised such as those undergoing chemotherapy for cancer; those 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 infections. You should seek advice about drinking water from your physician or health care provider. Additional guidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the Safe Drinking Water Hotline at (800) 426-4791.

# Public Participation Opportunities

Date:

Time:

Location:

#### **Phone Number:**

# OUR DRINKING WATER IS REGULATED

This report is a summary of the quality of the water we provide our customers. The analysis was made by using the data from the most recent U.S. Environmental Protection Agency (EPA) required tests and is presented in the attached pages. We hope this information helps you become more knowledgeable about what's in your drinking water.

# **Source 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 pickup substances resulting from the presence of animals or from human activity.

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.

#### En Español

To learn about future public meetings (concerning your drinking water), or to request to schedule one, please call us. Este informe en español, favor de llamar al tel. (210)233 - 2318 -para hablar con una persona bilingüe en español.

#### Where do we get our drinking water?

The source of drinking water used by SAWS OAKLAND ESTATES is purchased surface water from Canyon Lake and ground water from the Trinity Aquifer. A Source Water Susceptibility Assessment for your drinking water sources(s) is currently being updated by the Texas Commission on Environmental Quality. This information describes the susceptibility and and types of constituents 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. Some of this source water assessment information is available on Texas Drinking Water Watch at http://dww.tceq.state.state.tx.us/DWW/ . For more information on source water assessments and protection efforts at our system, please contact us.

#### ALL drinking water may contain contaminants

When drinking water meets federal standards there may not be any health benefits to purchasing bottled water or point of use devices. 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 (1-800-426-4791).

#### **Secondary Constituents**

Many constituents (such as calcium, sodium, or iron) which are often found in drinking water, can cause taste, color, and odor problems. The taste and odor constituents are called secondary constituents and are regulated by the State of Texas, not the EPA. These constituents are not causes for health concern. Therefore, secondaries are not required to be reported in this document but they may greatly affect the appearance and taste of your water.

#### **Required Additional Health 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. This water supply 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.

#### Abbreviations

- NTU Nephelometric Turbidity Units
- MFL million fibers per liter (a measure of asbestos)
- pCi/L picocuries per liter ( a measure of radioactivity)
- ppm parts per million, or milligrams per liter (mg/L)
- ppb parts per billion, or micrograms per liter
- ppt parts per trillion, or nanograms per liter
- ppq parts per quadrillion, or picograms per liter

## Definitions

Maximum Contaminant Level Goal or The level of a contaminant in drinking water below which there is no known or expected MCLG: risk to health. MCLGs allow for a margin of safety. 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. Maximum residual disinfectant level The level of a drinking water disinfectant below which there is no known or expected goal or MRDLG: risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants. Maximum residual disinfectant level or The highest level of a disinfectant allowed in drinking water. There is convincing MRDL: evidence that addition of a disinfectant is necessary for control of microbial contaminants. Regulatory compliance with some MCLs are based on running annual average of Avg: monthly samples. milligrams per liter or parts per million - or one ounce in 7,350 gallons of water. ppm: micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water. ppb: not applicable. na: Definitions: The following tables contain scientific terms and measures, some of which may require explanation.

### **Maximum Residual Disinfectant Level**

Year	Disinfectant	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Source of Disinfectant
2011	Chlorine Residual, Free	1.3	0.3	3.0	4.0	<4.0	ppm	Disinfectant used to control Microbes.

#### <u>Total Coliform</u>

Total coliform bacteria are used as indicators of microbial contamination of drinking water because testing for them is easy. While not disease-causing organisms themselves, they are often found in association with other microbes that are capable of causing disease. Coliform bacteria are more hardy than many disease-causing organisms; therefore, their absence from water is a good indication that the water is microbiologically safe for human consumption.

**Total Coliform**: REPORTED MONTHLY TESTS FOUND NO TOTAL COLIFORM BACTERIA. **Fecal Coliform**: REPORTED MONTHLY TESTS FOUND NO FECAL COLIFORM BACTERIA.

## 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	Collection Date	MCLG	Action Level (AL)	90 <sup>th</sup> Percentile	# Sites over (AL)	Units	Violation	Likley Source of Contamination
Copper	2009	1.3	1.3	.0516	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2009	0	15	1.46	0	ррь	N	Corrosion of household plumbing systems; Erosion of natural deposits.

(No asso	ociated adve	rse health el	ttects)					
Constituent	Collection Date	Highest Level Detected	Range of Levels Detected	MCL G	MCL	Units	Violation	Likely Source of Contamination
Aluminum	2010	.00192	.000192	0	.05	ppm	N	Abundant Naturally Occurring element.
Bicarbonate	2009	337	331 - 337	0	NA	ppm	N	Corrosion of carbonate rocks such as limestone.
Calcium	2010	108	98.6 - 108	0	NA	ppm	N	Abundant Naturally Occurring element.
Chloride	2009	16	14 – 16	0	300	ppm	N	Abundant Naturally Occurring element; used in water purification; byproduct of oil field activity.
Hardness as Ca/Mg	2010	316	197 – 316	0	300	ppm	N	Naturally Occurring Calcium and Magnesium.
Magnesium	2010	12.2	11.1 – 12.2	0	NA	ppm	N	Abundant naturally occurring element.
Nickel	2010	.00117	.000561 - .00117	0	NA	ppm	N	Erosion of natural deposits.
рН	2009	7.4	7.4 – 7.4	>7.0	>7.0	Units	N	Measure of corrosives in water.
Sodium	2010	7.58	6.38 - 7.58	0	NA	ppm	N	Erosion of natural occurring element.
Sulfate	2009	15	15 – 15	0	300	ppm	N	Naturally occurring; common industrial byproduct; byproduct of oil field activity.
Total Alkalinity as CaCO3	2009	276	271 – 276	0	NA	ppm	N	Naturally occurring soluble mineral salts.
Total Dissolved Solids	2009	327	303 - 327	0	1000	ppm	N	Total dissolved mineral constituents in water.
Zinc	2010	.30	.0130	0	5	ppm	N	Moderately abundant naturally occurring element; used in the metal industry.

# Secondary and Other Constituents not Regulated (No associated adverse health effects)

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Gross Beta Particles	2010	<4.0	<4.0 - <4.0	0	50	pCi/L	Ν	Decay of natural and man-made deposits.
Gross Alpha	2010	<2.0	<2.0 - <2.0	0	15	pCi/L	Ν	Erosion of natural deposits.

**\*Note:** "The MCL for beta particles is 4 mrem/year, EPA considers 50 pCi/L to be the level of concern for beta particles."

# **Regulated Contaminants**

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCL G	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5)*	2010	1.6	1 - 1.6	0	60	ррЬ	Ν	By-product of drinking water chlorination.

Total Trihalomethanes (TThm)*	2010	10.4	8.5 - 10.4	0	80	ррb	Ν	By-product of drinking water chlorination.

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCL G	MCL	Units	Violation	Likely Source of Contamination
Arsenic	2010	0.644	0.489 - 0.644	0	10	ррЬ	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	2010	0.03	0.02 - 0.03	0	2	ppm	Ν	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.

Chromium	2010	6.88	5.2 - 6.88	0	100	ррЬ	N	Discharge from steel and pulp mills; Erosion of natural deposits.
Fluoride	2009	0.41	0.24 - 0.41	0	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate [measured as Nitrogen]	2011	1.73	1.05 - 1.73	0	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Selenium	2010	2.72	2.29 - 2.72	0	50	ppb	N	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
Thallium	2010	0.02	0.018 - 0.02	0	2	ррЬ	N	Discharge from electronics, glass, and Leaching from ore-processing sites; drug factories.

<u>Turbidity</u> Turbidity has no health effects. However turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, diarrhea, and associated headaches.

Contaminant	Collection Date	Highest Single Measurement	Lowest Monthly % of Samples Meeting Limits	Turbidity Limits	Unit of Measurement	Violation	Source of Contamination
Turbidity	2010	.07	100.00	0.3	NTU	Ν	Soil Runoff