

CONSUMER CONFIDENCE REPORT

Report Covers Calendar Year: January 1 – December 31, 2010

We are pleased to present to you this year's water quality report. Our constant goal is to provide you with a safe and dependable supply of drinking water. Last year your tap water met all the EPA and state drinking water health standards. The Town of Florence Water System carefully safeguards its water supplies and once again we are proud to report that our system did not violate a maximum contaminant level or of any other water quality Standard.

Este informe contiene información muy importante sobre el agua usted bebe. Tradúscalo ó hable con alguien que lo entienda bien.

I. Public Water System (PWS) Information

PWS Name:	Town of Florence				
PWS ID #	AZ04- 11017				
Owner / Operator Name:	Town of Florence				
Telephone #	(520) 868-7677	Fax #	(520) 868-7637	E-mail	Kate.milzarski@florenceaz.gov
We want our valued customers to be informed about their water quality. If you would like to learn more about public participation or to attend any of our regularly scheduled meetings, please contact Kate Milzarski at (520) 868-7677 for additional opportunity and meeting dates and times.					

II. Drinking Water Sources

The sources of drinking water (both tap 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 can pick up substances resulting from the presence of animals or from human activity.

Our water source(s): Groundwater pumped from Town of Florence Well No. 1, 4, and 5 (Entry points to distribution system 001, 002, 003)

III. Consecutive Connection Sources

There are no consecutive connections.

IV. Drinking Water Contaminants

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 that 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 byproducts of industrial processes and petroleum production, and also may come from gas stations, urban stormwater runoff, and septic systems.
Radioactive contaminants, that can be naturally occurring or be the result of oil and gas production and mining activities.

V. Vulnerable Population

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. 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 of infections. These people should seek advice about drinking water from their health care providers. For more information about contaminants and potential health effects, or to receive a copy of the U.S. Environmental Protection Agency (EPA) and the U.S. Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and microbiological contaminants call the EPA *Safe Drinking Water Hotline* at 1-800-426-4791.

VI. Source Water Assessment

If the public water system received a Source Water Assessment (SWA), include a brief summary of the susceptibility as summarized in the SWA report. Further source water assessment documentation can be obtained by contacting ADEQ, 602-771-4641.

VII. Definitions

AL = Action Level - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements.
MCL = Maximum Contaminant Level - The "Maximum Allowed" is the highest level of a contaminant that is allowed in drinking water.
MCLG = Maximum Contaminant Level Goal - The "Goal" is the level of a contaminant in drinking water below which there is no known or expected risk to health.
MFL = Million fibers per liter.
MRDL = Maximum Residual Disinfectant Level.
MRDLG = Maximum Residual Disinfectant Level Goal.
MREM = Millirems per year - a measure of radiation absorbed by the body.
NA = Not Applicable, sampling was not completed by regulation or was not required.
NTU = Nephelometric Turbidity Units, a measure of water clarity.
PCi/L = Picocuries per liter - picocuries per liter is a measure of the radioactivity in water.
PPM = Parts per million or Milligrams per liter (mg/L).
PPB = Parts per billion or Micrograms per liter (µg/L).
PPT = Parts per trillion or Nanograms per liter.
PPQ = Parts per quadrillion or Picograms per liter.
TT = Treatment Technique - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

ppm x 1000 = ppb
ppb x 1000 = ppt
ppt x 1000 = ppq

VIII. Health Effects Language

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods-of-time because of rainfall or agricultural activity. If you are caring for an infant, and detected nitrate levels are above 5 ppm, you may ask advice from your health care provider.

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. The Town of Florence is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing

These tables show results of our most recent monitoring for the period January 1, 2006 to December 31, 2010.

IX. Water Quality Data

Contaminant (units)	Violation Y / N	Highest Level Detected	Range Detected Absent (A) or Present (P)	MCL	MCLG	Sample Month Year	Likely Source of Contamination
Microbiological							
Total Coliform Bacteria (System takes ≥ 40 monthly samples) 5% of monthly samples are positive; (System takes ≤ 40 monthly samples) 1 positive monthly sample	N	N/A	P (1 sample in May and 1 in June; other A)	No more than 1 positive monthly sample	0	1 in May & 1 in June 2010	Naturally Present in Environment
Disinfectants							
Chlorine (ppm)	N	1.29	0.91-1.29	MRDL = 4	MRDLG = 4	Jan. to Dec. 2010	Water additive used to control microbes
Disinfection By-Products							
Haloacetic Acids (ppb) (HAA5)	N	0.0022	<0.0020- 0.0022	60	n/a	8/2010	Byproduct of drinking water disinfection
Total Trihalomethanes (ppb) (TTHM)	N	0.0124	0.0041-0.0124	80	n/a	8/2010	Byproduct of drinking water disinfection
Lead & Copper							
Copper (ppm)	N	90 th Percentile	0.15	AL = 1.3	ALG = 1.3	7/2009	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb)	N	90 th Percentile	2.5	AL = 15	0	7/2009	Corrosion of household plumbing systems; erosion of natural deposits
Radionuclides							
Alpha emitters (pCi/L)			5.1-6.2	15	0	1/2009	Erosion of natural deposits
Inorganics							
Antimony (ppb)		Waiver, no monitoring required by ADEQ for 2011		6	6		Discharge from petroleum refineries; fire retardants; ceramics, electronics and solder
Arsenic (ppb)		Waiver, no monitoring required by ADEQ for 2011		10	0		Erosion of natural deposits, runoff from orchards, runoff from glass and electronics production wastes
Asbestos (MFL)		Waiver, no monitoring required by ADEQ for 2011		7	7		Decay of asbestos cement water mains; Erosion of natural deposits
Barium (ppm)		Waiver, no monitoring required by ADEQ for 2011		2	2		Discharge of drilling wastes; discharge from metal refineries; Erosion of natural deposits
Beryllium (ppb)		Waiver, no monitoring required by ADEQ for 2011		4	4		Discharge from metal refineries and coal- burning factories; discharge from electrical, aerospace, and defense industries
Cadmium (ppb)		Waiver, no monitoring required by ADEQ for 2011		5	5		Corrosion of galvanized pipes; natural deposits; metal refineries; runoff from waste batteries and paints
Chromium (ppb)		Waiver, no monitoring required by ADEQ for 2011		100	100		Discharge from steel and pulp mills; Erosion of natural deposits
Cyanide (ppb)		Waiver, no monitoring required by ADEQ for 2011		200	200		Discharge from steel/metal factories; Discharge from plastic and fertilizer factories
Fluoride (ppm)		Waiver, no monitoring required by ADEQ for 2011		4	4		Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories

Contaminant (units)	Violation Y / N	Highest Level Detected	Range Detected Absent (A) or Present (P)	MCL	MCLG	Sample Month Year	Likely Source of Contamination
Mercury (ppb)		Waiver, no monitoring required by ADEQ for 2011		2	2		Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills and cropland.
Nitrate (ppm)* See missed monitoring statement in section XII.	N	8.8	2.3-8.8	10	10	2/2010 11/2010	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (ppm)		Waiver, no monitoring required by ADEQ for 2011		1	1		Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium (ppb)		Waiver, no monitoring required by ADEQ for 2011		50	50		Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Thallium (ppb)		Waiver, no monitoring required by ADEQ for 2011		2	0.5		Leaching from ore-processing sites; discharge from electronics, glass, and drug factories
Synthetic Organic Contaminants							
2,4-D (ppb)		Waiver, no monitoring required by ADEQ for 2011		70	70		Runoff from herbicide used on row crops
2,4,5-TP (Silvex) (ppb)		Waiver, no monitoring required by ADEQ for 2011		50	50		Residue of banned herbicide
Acrylamide		Waiver, no monitoring required by ADEQ for 2011		TT	0		Added to water during sewage / wastewater treatment
Alachlor (ppb)		Waiver, no monitoring required by ADEQ for 2011		2	0		Runoff from herbicide used on row crops
Atrazine (ppb)		Waiver, no monitoring required by ADEQ for 2011		3	3		Runoff from herbicide used on row crops
Benzo (a) pyrene (PAH) (ppt)		Waiver, no monitoring required by ADEQ for 2011		200	0		Leaching from linings of water storage tanks and distribution lines
Carbofuran (ppb)		Waiver, no monitoring required by ADEQ for 2011		40	40		Leaching of soil fumigant used on rice and alfalfa
Chlordane (ppb)		Waiver, no monitoring required by ADEQ for 2011		2	0		Residue of banned termiticide
Dalapon (ppb)		Waiver, no monitoring required by ADEQ for 2011		200	200		Runoff from herbicide used on rights of way
Di (2-ethylhexyl) adipate (ppb)		Waiver, no monitoring required by ADEQ for 2011		400	400		Discharge from chemical factories
Di (2-ethylhexyl) phthalate (ppb)		Waiver, no monitoring required by ADEQ for 2011		6	0		Discharge from rubber and chemical factories

Contaminant (units)	Violation Y / N	Highest Level Detected	Range Detected Absent (A) or Present (P)	MCL	MCLG	Sample Month Year	Likely Source of Contamination
Dibromochloropropane (ppt)		Waiver, no monitoring required by ADEQ for 2011		200	0		Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards
Dinoseb (ppb)		Waiver, no monitoring required by ADEQ for 2011		7	7		Runoff from herbicide used on soybeans and vegetables
Diquat (ppb)	N	<0.4		20	20	9/2010	Runoff from herbicide use
Dioxin [2,3,7,8-TCDD] (ppq)		Waiver, no monitoring required by ADEQ for 2011		30	0		Emissions from waste incineration and other combustion; discharge from chemical factories
Endothall (ppb)		Waiver, no monitoring required by ADEQ for 2011		100	100		Runoff from herbicide use
Endrin (ppb)		Waiver, no monitoring required by ADEQ for 2011		2	2		Residue of banned insecticide
Epichlorohydrin		Waiver, no monitoring required by ADEQ for 2011		TT	0		Discharge from industrial chemical factories; an impurity of some water treatment chemicals
Ethylene dibromide (ppt)		Waiver, no monitoring required by ADEQ for 2011		50	0		Discharge from petroleum refineries
Glyphosate (ppb)		Waiver, no monitoring required by ADEQ for 2011		700	700		Runoff from herbicide use
Heptachlor (ppt)		Waiver, no monitoring required by ADEQ for 2011		400	0		Residue of banned temiticide
Heptachlor epoxide (ppt)		Waiver, no monitoring required by ADEQ for 2011		200	0		Breakdown of heptachlor
Hexachlorobenzene (ppb)		Waiver, no monitoring required by ADEQ for 2011		1	0		Discharge from metal refineries and agricultural chemical factories
Hexachlorocyclo pentadiene (ppb)		Waiver, no monitoring required by ADEQ for 2011		50	50		Discharge from chemical factories
Lindane (ppt)		Waiver, no monitoring required by ADEQ for 2011		200	200		Runoff/leaching from insecticide used on cattle, lumber, gardens
Methoxychlor (ppb)		Waiver, no monitoring required by ADEQ for 2011		40	40		Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, livestock
Oxamyl [Vydate] (ppb)		Waiver, no monitoring required by ADEQ for 2011		200	200		Runoff/leaching from insecticide used on apples, potatoes and tomatoes

Contaminant (units)	Violation Y / N	Highest Level Detected	Range Detected Absent (A) or Present (P)	MCL	MCLG	Sample Month Year	Likely Source of Contamination
PCBs [Polychlorinated biphenyls] (ppt)		Waiver, no monitoring required by ADEQ for 2011		500	0		Runoff from landfills; discharge of waste chemicals
Pentachlorophenol (ppb)		Waiver, no monitoring required by ADEQ for 2011		1	0		Discharge from wood preserving factories
Picloram (ppb)		Waiver, no monitoring required by ADEQ for 2011		500	500		Herbicide runoff
Simazine (ppb)		Waiver, no monitoring required by ADEQ for 2011		4	4		Herbicide runoff
Toxaphene (ppb)		Waiver, no monitoring required by ADEQ for 2011		3	0		Runoff/leaching from insecticide used on cotton and cattle
Volatile Organics							
Benzene (ppb)		Waiver, no monitoring required by ADEQ for 2011		5	0		Discharge from factories; leaching from gas storage tanks and landfills
Carbon tetrachloride (ppb)		Waiver, no monitoring required by ADEQ for 2011		5	0		Discharge from chemical plants and other industrial activities
Chlorobenzene (ppb)		Waiver, no monitoring required by ADEQ for 2011		100	100		Discharge from chemical and agricultural chemical factories
o-Dichlorobenzene (ppb)		Waiver, no monitoring required by ADEQ for 2011		600	600		Discharge from industrial chemical factories
p-Dichlorobenzene (ppb)		Waiver, no monitoring required by ADEQ for 2011		75	75		Discharge from industrial chemical factories
1,2-Dichloroethane (ppb)		Waiver, no monitoring required by ADEQ for 2011		5	0		Discharge from industrial chemical factories
1,1-Dichloroethylene (ppb)		Waiver, no monitoring required by ADEQ for 2011		7	7		Discharge from industrial chemical factories
cis-1,2-Dichloroethylene (ppb)		Waiver, no monitoring required by ADEQ for 2011		70	70		Discharge from industrial chemical factories
trans-1,2-Dichloroethylene (ppb)		Waiver, no monitoring required by ADEQ for 2011		100	100		Discharge from industrial chemical factories
Dichloromethane (ppb)		Waiver, no monitoring required by ADEQ for 2011		5	0		Discharge from pharmaceutical and chemical factories
1,2-Dichloropropane (ppb)		Waiver, no monitoring required by ADEQ for 2011		5	0		Discharge from industrial chemical factories
Ethylbenzene (ppb)		Waiver, no monitoring required by ADEQ for 2011		700	700		Discharge from petroleum refineries
Styrene (ppb)		Waiver, no monitoring		100	100		Discharge from rubber and plastic

Contaminant (units)	Violation Y / N	Highest Level Detected	Range Detected Absent (A) or Present (P)	MCL	MCLG	Sample Month Year	Likely Source of Contamination
		required by ADEQ for 2011					factories; leaching from landfills
Tetrachloroethylene (ppb)		Waiver, no monitoring required by ADEQ for 2011		5	0		Discharge from factories and dry cleaners
1,2,4-Trichlorobenzene (ppb)		Waiver, no monitoring required by ADEQ for 2011		70	70		Discharge from textile-finishing factories
1,1,1-Trichloroethane (ppb)		Waiver, no monitoring required by ADEQ for 2011		200	200		Discharge from metal degreasing sites and other factories
1,1,2-Trichloroethane (ppb)		Waiver, no monitoring required by ADEQ for 2011		5	3		Discharge from industrial chemical factories
Trichloroethylene (ppb)		Waiver, no monitoring required by ADEQ for 2011		5	0		Discharge from metal degreasing sites and other factories
Toluene (ppm)		Waiver, no monitoring required by ADEQ for 2011		1	1		Discharge from petroleum factories
Vinyl Chloride (ppb)		Waiver, no monitoring required by ADEQ for 2011		2	0		Leaching from PVC piping; discharge from chemical factories
Xylenes (ppm)		Waiver, no monitoring required by ADEQ for 2011		10	10		Discharge from petroleum or chemical factories

XI. Stage 2 Disinfectants and Disinfection By-products Rule

Stage 2 DBP Rule requires some systems to complete an Initial Distribution System Evaluation (IDSE) to characterize DBP levels in their distribution systems and identify locations to monitor DBPs for Stage 2 DBP Rule compliance. The following table summarizes the individual sample results for the IDSE monitoring in 2009:

Contaminant	Number of Analyses	Minimum Level Detected	Highest Level Detected
Haloacetic Acids (HAA5) (ppb)	N/A	40/30 Request Approval Underway by ADEQ	
Total Trihalomethanes (TTHM) (ppb)	N/A	40/30 Request Approval Underway by ADEQ	40/30 Request Approval Underway by ADEQ

XII. Missed Monitoring Violation for 2010-1st Quarter 2011 for Nitrate

The Town of Florence failed to perform water quality monitoring at two (2) of its wells (Well No. 5 (EPDS 001) and Well No. 4 (EPDS 002) on a quarterly basis for Nitrate in the 2nd-4th quarters of 2010, after gaining results above 5 mg/L from the ADEQ Monitoring Assistance Program (MAP) contractor. The nitrate results from the MAP sampling events in 2010 for Well No. 5 (EPDS 001) and Well No. 4 (EPDS 002) were 8.8 and 7.6 mg/L, respectively. The MCL is 10 mg/L for Nitrate, and health effects language is on page 1 of 6 for Nitrate.

The Town was not aware that the ADEQ MAP program is not responsible for quarterly Nitrate monitoring after results above 5 mg/L until mid-June 2011. In the 1st quarter 2011, the ADEQ MAP Contractor collected Nitrate samples at two (2) wells, but not Well No. 4 (EPDS 002) as required under the quarterly monitoring trigger. Results were 2 mg/L for Well 1 (EPDS 003 – located in North Florence) and 8.5 mg/L for Well No. 5 (EPDS 001.) This missed monitoring public notification is intended for 2010 through 1st quarter of 2011. The Town will begin quarterly monitoring quarterly monitoring for the two impacted wells beginning in 2nd quarter 2011.

XII. Water Conservation

The Town of Florence encourages residents to conserve water. For free tips on how to conserve water in your home or business, please visit www.florenceaz.gov/water or contact Kate Milzarski at (520) 868-7677.