

Chemical Table	MCL	PHG (MCLG)	Fresno Average	Range of Detection's	MCL Violation	Last Sampled	Typical Source of Contaminant
Volatile Organic Contaminants							
cis-1,2-Dichloroethylene (ug/L)	6	(70)	0.21	nd - 5.3	NO	2010	Discharge from industrial chemical factories; major biodegradation byproduct of TCE and PCE groundwater contamination
trans-1,2-Dichloroethylene (ug/L)	10	60	0.00	nd - 0.87	NO	2010	Discharge from industrial chemical factories; major biodegradation byproduct of TCE and PCE groundwater contamination
Tetrachloroethylene (PCE) (ug/L)	5	0.06	0.07	nd - 1.7	NO	2010	Discharge from factories, drycleaners, and auto shops (metal degreaser)
Trichloroethylene (TCE) (ug/L)	5	0.8	0.28	nd - 4.2	NO	2010	Discharge from metal degreasing sites and other factories
Synthetic Organic Contaminants							
Dibromochloropropane (DBCP) (ng/L)	200	1.7	55	nd - 190	NO	2010	Banned nematocide that may still be present in soils due to runoff/leaching from former use on soybeans, cotton, vineyards, tomatoes, and tree fruit
Ethylene Dibromide (EDB) (ng/L) (1)	50	(0)	0.4	nd - 64	YES	2010	Discharge from petroleum refineries; underground gas tank leaks; banned nematocide that may still be present in soils due to runoff and leaching from grain and fruit crops
Inorganic Contaminants							
Aluminum (AL) (ug/L)	1000	0.6	0.89	nd - 180	NO	2008	Erosion of natural deposits; residue from some surface water treatment plants
Arsenic (As) (ug/L)	50	0.004	1.4	nd - 5.5	NO	2008	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Barium (Ba) (mg/L)	1	(2)	0.008	nd - 0.15	NO	2008	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Fluoride (ug/L)	2000	1000	185	nd - 1200	NO	2008	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (NO3) (mg/L)	45	45	21	0 - 42	NO	2010	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Radionuclides (2)							
Gross Alpha (pCi/L)	15	n/a	3.19	-1.53 - 22.90	NO	2007	Erosion of natural deposits
Radium 226 (pCi/L)	3	n/a	0.72	-0.12 - 3.84	NO	2007	Erosion of natural deposits
Radium 228 (pCi/L)	2	n/a	0.60	-0.22 - 2.3	NO	2007	Erosion of natural deposits
Uranium (pCi/L)	20	0.5	5.89	nd - 16	NO	2007	Erosion of natural deposits
Unregulated Contaminants (ICR, UCMR & Misc)							
DCPA Diacid + Monoacid	n/a		0.969	nd - 4.7	n/a	2004	We are required by regulations to monitor for certain unregulated contaminants. This is helpful to the USEPA and CDHS for tracking the location of contaminants and whether there is a need for stricter regulations. Several contaminants indicate detected values with a "<" symbol meaning less than. There are two possible reasons for this. First, the Detection Limit for Reporting, DLR, has not been established by EPA or CDHS. Second, for various reasons, the analytical equipment is unable to quantify the value below the stated "less than" value but analysis indicates the contaminant is present. For either reason, the concentration cannot be quantified and the City must assume that a "Fresno Average" is not applicable for this report.
Dichlorodifluoromethane (Freon 12)	n/a		0.510	nd - 21	n/a	2008	
Trichloropropane (1,2,3-TCP) (3)	n/a		0.003	nd - 0.13	n/a	2007	

Micro Biological Contaminants

Over 220 bacteriological samples are collected every month in Fresno's distribution system. In samples are collected from wells and treatment sites.

Contaminant	Highest No. of Detection's	No. of Months in Violation	MCL	MCLG
Total Coliform Bacteria	3 of 251 or 1.2%	0	5%	0
E.coli	0	0	A routine sample is positive for E.coli and a repeat sample is positive for total, fecal or E.coli bacteria	0

addition, over 300 bacteriological

Typical Source of Bacteria

Naturally present in the environment

Human or animal fecal waste

Lead and Copper

Lead and Copper samples are collected from wells, the distribution system and from inside residences.

Contaminant	No. of Samples Collected	90th Percentile Level Detected	No. of Sites Exceeding Action Level	Action Level	MCLG	Typical Source of Contaminant
Lead (ug/L) (Sampled in 2009)	50	2	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (mg/L) (Sampled in 2009)	50	0.17	0	1.3	0.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

Tabla 3: PLOMO Y COBRE

Las muestras de plomo y cobre se recogen de los pozos, del sistema de distribución y de las casas.

Contaminante	Número de Pruebas Recogidas	Nivel Detectado sobre el Percentil 90	Número de Sitios sobre el Nivel de Acción	Nivel de Acción	MNMC	Último Muestreo
Plomo (ug/L) (muestreado en el 2009)	50	2	0	15	0.2	Corrosión interna de las tuberías de agua residenciales; efluentes de fabricantes industriales; erosión de depósitos naturales
Cobre (mg/L) (muestreado en el 2009)	50	0.17	0	1.3	0.3	Corrosión interna de las tuberías de agua residenciales; erosión de depósitos naturales; percolado de preservativos de madera

Secondary Standards Contaminants List

Secondary standards are based on aesthetic factors (taste, appearance and odor, etc.) and are not health related.

Inorganic Contaminants	MCL	Fresno Average	Range of Detection's	MCL Violation	Last Sampled
Aluminum (ug/L)	200	0.008	nd - 180	No	2008
Apparent Color (Unfiltered)	15	1.01	nd - 5	No	2008
Chloride (Cl) (mg/L)	500	9	1.7 - 49	No	2008
Copper (Cu) (mg/L)	1	0.001	0 - .085	No	2008
Iron (Fe) (ug/L) (4)	300	5	nd - 570	Yes	2008
Manganese (Mn) (ug/L)	50	0.11	nd - 23	No	2008
Sodium (Na) (mg/L)	n/a	19	4.4 - 32	No	2008
Specific Conductance (E.C.) (umho/cm+)	1600	309	88 - 740	No	2008
Sulfate (SO4) (mg/L)	500	10	2 - 36	No	2008
Total Dissolved Solids (TDS) (mg/L)	1000	219	97 - 430	No	2008
Total Hardness (as CaCO3) (mg/L)	n/a	114	26- 300	No	2008
Turbidity (Lab) (units)	5	0.25	0.10 - 4.3	No	2008
Zinc (Zn) (ug/L)	5000	1.58	nd - 320	No	2008

Turbidity in North East Fresno related to Surface Water Treatment Plant Operations							
	MCL	MCLG	Level Found	Range	Sample Date	Violation	Typical Source
Turbidity (NTU)	TT = 1 NTU	n/a	0.139	n/a	1-Feb-10	n/a	Soil runoff
	TT = 95% of samples <0.3 NTU		100%		Continuous	n/a	

Turbidity is a measurement of the cloudiness of the water determined by the ratio of the intensity of light scattered by the sample to the intensity of incident light. We monitor it because it is a good indicator of the effectiveness of our filtration system.

Tabla 5: TURBIDEZ EN EL NORESTE DE FRESNO, RELACIONADA CON LAS OPERACIONES DE LA PLANTA DE TRATAMIENTO DE AGUA SUPERFICIAL

	NMC	MNMC	Nivel Encontrado	Rango	Fecha de la Prueba	Violación	Fuente Típica
Turbidez (NTU)	TT = 1 NTU	n/a	0.139	n/a	1-Feb-10	n/a	Escorrentía por el terreno
	TT = 95% de las pruebas < 0.3 NTU		100%		Continua		

La turbidez es una medida de la turbiedad del agua, determinada por el ratio de la intensidad de la luz diseminada por la muestra contra la intensidad de la luz incidental. Nosotros la monitorizamos porque es un buen indicador de la efectividad de nuestro sistema de filtrado.