

**Madison Water Utility
Water Quality Watch List**

Inorganics - Regulated

Substance	Maximum	Units	MCLG	PAL	MCL	Detects Below PAL	Watch List	Action Plan	Reference
Arsenic	0.80	(ug/l)	zero	1	10	#6, #7, #8, #17, #19, #23, #24, #27, #28, #30	none		NR 140.10
Barium	53	(ug/l)	2000	400	2000	All Wells	none		NR 140.10
Chromium	2.2	(ug/l)	100	10	100	All Except #8, #24, #28, #30	none		NR 140.10
Copper	46	(ug/l)	1300	130	1300	All Wells	none		NR 140.10
Lead	0.84	(ug/l)	zero	1.5	15	All Except #13 and #27	none		NR 140.10
Nickel	2.7	(ug/l)	100	20	100	All Wells	none		NR 140.10
Nitrogen-Nitrate	3.7	(mg/l)	10	2	10	#9, #12, #13, #18, #20, #25, #26, #27, #29	#6, #11, #14, #15, #16, #23	Monitor	NR 140.10
Selenium	1.0	(ug/l)	50	10	50	#6, #8, #9, #11, #13, #14, #15, #16, #20, #23, #25	none		NR 140.10
Thallium	0.26	(ug/l)	0.5	0.4	2	#6, #11, #12, #15, #17, #19, #27	none		NR 140.10

Inorganics - Unregulated

Substance	Maximum	Units	MCLG	Watch	SMCL	Wells with Detects	Watch List	Action Plan	Reference
Aluminum	1.3	(ug/l)	n/a	50	200	All Wells	none		NR 809.70
Chloride	103	(mg/l)	n/a	125	250	All Wells	none		NR 809.70
Iron	0.55	(mg/l)	n/a	0.1	0.3	All Except #9, #14, #20	#7, #8, #19, #24, #27, #28, #30	#7 - Install Filtration (2014), #8 - Install Filtration (2013), #19 - Install Filtration (2016), #30 - Install Filtration (2018)	NR 809.70
Manganese	49	(ug/l)	n/a	20	50	All Except #14 and #16	#7, #8, #17, #19, #23, #24, #26, #27, #28	#7 - Install Filtration (2014), #8 - Install Filtration (2013), #19 - Install Filtration (2016)	NR 809.70
Sodium	36	(mg/l)	n/a	10	20	All Wells	#6, #9, #11, #14, #15, #16, #17, #23, #27	Monitor	EPA DWEL
Sulfate	56	(mg/l)	n/a	125	250	All Wells	none		NR 809.70
Zinc	26	(ug/l)	n/a	2500	5000	All Wells	none		NR 809.70

MCL - Maximum Contaminant Level (Legal Limit)

MCLG - MCL Goal (Public Health Goal)

PAL - Preventive Action Limit (NR 140 - Groundwater Quality)

SMCL - Secondary MCL (Aesthetic Guideline)

DWEL - Drinking Water Equivalency Level

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Organics - Regulated

Contaminant	Maximum*	Units	MCLG	PAL	MCL	Detects Below PAL%	Watch List	Action Plan	Reference
1,2-Dichloroethane	[0.17]	(ug/l)	zero	0.5	5	#17	none		NR 140.10
1,2-Dichloroethylene (cis)	[0.40]	(ug/l)	70	7	70	#8, #9, #11, #14	none		NR 140.10
Ethylbenzene	[0.14]	(ug/l)	700	140	700	#225	none		NR 140.10
Tetrachloroethylene [PCE]	3.9	(ug/l)	zero	0.5	5	#6, #27	#9, #11, #14, #15, #18	#15 - Low-profile Air Stripper, Groundwater Investigation; #11, #14, #18 - Budget One GW Investigation per Year	NR 140.10
Toluene	2.2	(ug/l)	1000	160	1000	#15, #18, #25	none		NR 140.10
1,1,1-Trichloroethane	[0.29]	(ug/l)	200	40	200	#9, #18	none		NR 140.10
Trichloroethylene [TCE]	0.43	(ug/l)	zero	0.5	5	#11, #14, #15, #18, #27	none		NR 140.10
Xylene, Total	1.1	(ug/l)	10000	400	10000	#115, #225	none		NR 140.10

* Maximum detection observed at any Madison well from 2008 through 2012 % Detected in at least one sample collected from 2008 through 2012

Organics - Unregulated

Contaminant	Maximum*	Units	MCLG	PAL	ES	Wells with Detects%	Watch List	Action Plan	Reference
Chloromethane	3.8	(ug/l)	n/a	3	30	#15	#15	Monitor	NR 140.10
Dichlorodifluoromethane	[0.23]	(ug/l)	n/a	200	1000	#14	none		NR 140.10
Methyl t-butyl ether [MTBE]	[0.14]	(ug/l)	n/a	12	60	#15	none		NR 140.10
Trichlorofluoromethane	1.3	(ug/l)	n/a	698	3490	#11	none		NR 140.10
1,2,4-Trimethylbenzene	0.64	(ug/l)	n/a	96	480	#7, #15	none		NR 140.10
1,3,5-Trimethylbenzene	[0.20]	(ug/l)	n/a	96	480	#15	none		NR 140.10

* Maximum detection observed at any Madison well from 2008 through 2012 % Detected in at least one sample collected from 2008 through 2012

Radionuclides

Contaminant	Maximum	Units	MCLG	Watch	MCL	Wells with Detects	Watch List	Action Plan	Reference
Gross alpha	13.8	pCi/L	zero	5	15	All Wells	#7, #13, #19, #25, #27, #28, #30	Monitor	NR 809.50
Gross beta	14.8	pCi/L	zero	10	50	All Wells	#19, #28	Monitor	NR 809.50
Combined Radium	5.8	pCi/L	zero	2	5	All Wells	#7, #8, #15, #19, #27, #28, #30	Monitor	NR 809.50
Uranium	2.0	(ug/L)	zero	3	30	All Wells	none		NR 809.50

ES - Enforcement Standard (NR 140 - Groundwater Quality) MCL - Maximum Contaminant Level (Legal Limit) MCLG - MCL Goal (Public Health Goal) PAL - Preventive Action Limit (NR 140 - Groundwater Quality)