









# Water Quality Test Results: for data collected in calendar year 2005

										
Parameter	Units	State MCL [MRDL]	PHG (MCLG) [MRDLG]	Range Average	FILTRATION PLANT EFFLUENTS					Major Sources in Drinking Water
					Weymouth Plant	Diemer Plant	Jensen Plant	Combined Skinner Plants	Mills Plant	

	Percent State Project Water	%	NA	NA	Range Average	35 - 68 55	34 - 60 50	100 100	27 - 69 40	100 100	NA
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## E PRIMARY STANDARDS - Mandatory Health-Related Standards

### CLARITY

Combined Filter	NTU	0.3		Highest	0.08	0.06	0.06	0.18	0.05	
Effluent Turbidity	%	95(a)	NA	% < 0.3	100%	100%	100%	96%	100%	Soil runoff

### MICROBIOLOGICAL

Total Coliform Bacteria	%	5.0 (b)	(0)	Range Average	Distribution System-wide: 0%					Naturally present in the environment
Fecal Coliform and <i>E. coli</i>	(c)	(c)	(0)	Distribution System-wide Fecal Coliform-positive samples = 0					Human and animal fecal waste	
Heterotrophic Plate Count (HPC) (d)	CFU/ml	TT	NA	Range Average	TT	TT	TT	TT	TT	Naturally present in the environment
<i>Cryptosporidium</i> (e)	Oocysts/200 L	TT	(0)	Range Average	TT	TT	TT	TT	TT	Human and animal fecal waste
<i>Giardia</i> (e)	Cysts/200 L	TT	(0)	Range Average	TT	TT	TT	TT	TT	Human and animal fecal waste
Total Culturable Viruses (e)	MPN/100 L	TT	(0)	Range Average	TT	TT	TT	TT	TT	Human and animal fecal waste
<i>Legionella</i>	MPN/100 L	TT	(0)	Range Average	TT	TT	TT	TT	TT	Naturally present in the environment

### ORGANIC CHEMICALS

Acrylamide	NA	TT	(0)	Range Average	TT	TT	TT	TT	TT	Water treatment from chemical impurities
Epichlorohydrin	NA	TT	(0)	Range Average	TT	TT	TT	TT	TT	Water treatment from chemical impurities

### INORGANIC CHEMICALS

Aluminum (f)	ppb	1000	600	Range Average	ND - 82 ND	ND - 123 ND	ND - 118 55	ND - 151 ND	ND - 83 52	Residue from water treatment process; natural deposits; erosion
Arsenic	ppb	50	0.004	Range Average	ND ND	ND ND	ND ND	ND ND	ND - 2.0 ND	Natural deposits erosion; glass and electronics production wastes
Barium	ppb	1000	2000	Range Average	ND ND	ND - 102 ND	ND ND	ND - 104 ND	ND ND	Oil and metal refineries discharges; natural deposits erosion
Fluoride (naturally-occurring)	ppm	2	1	Range Average	0.11 - 0.21 0.17	0.15 - .022 0.19	0.11 - 0.27 0.22	0.16 - 0.28 0.23	ND - .11 ND	Erosion of natural deposits; water additive for tooth health
Nitrate (as N) (g)	ppm	10	10	Range Average	ND - 1.1 .54	ND - 0.81 0.52	ND - 0.61 0.54	ND - 0.75 ND	ND - 1.5 .79	Runoff & leaching from fertilizer use; sewage; natural erosion
Nitrate and Nitrite (as N)	ppm	10	10	Range Average	ND - 1.1 0.54	ND - 0.81 0.52	ND - 0.61 0.54	ND - 0.75 ND	ND - 1.5 0.79	Runoff & leaching from fertilizer use; sewage; natural erosion

### RADIONUCLIDES (h)

Gross Alpha Particle Activity	pCi/L	15	(0)	Range Average	ND ND	ND - 3.2 ND	ND ND	ND - 5.5 4.2	ND ND	Erosion of natural deposits
Gross Beta Particle Activity	pCi/L	50	(0)	Range Average	ND ND	ND - 6.4 4.8	ND ND	ND ND	ND ND	Decay of natural & man-made deposits
Uranium	pCi/L	20	0.43	Range Average	ND ND	ND ND	ND ND	2.9 - 3.2 3.0	ND ND	Erosion of natural deposits

### DISINFECTION BYPRODUCTS, DISINFECTANT RESIDUALS, AND DISINFECTION BYPRODUCTS PRECURSORS (FEDERAL)

Total Trihalomethanes (TTHM) (i)	ppb	80	NA	Range Average	29 - 69 44	29 - 69 44	10 - 75 41	36 - 89 60	11 - 68 24	Byproduct of drinking water chlorination
Total Trihalomethanes (TTHM) (j)	ppb	80	NA	Range Highest RAA	Distribution System-wide: Distribution System-wide:			11 - 85 61		Byproduct of drinking water chlorination
Haloacetic Acids (five) (HAA5) (i) (j)	ppb	60	NA	Range Average	11 - 39 20	10 - 40 17	4.6 - 28 15	16 - 40 24	4.1 - 21 8.0	Byproduct of drinking water chlorination
Haloacetic Acids (five) (HAA5) (i) (j)	ppb	60	NA	Range Highest RAA	Distribution System-wide: Distribution System-wide:			4.9 - 42 27		Byproduct of drinking water chlorination
Total Chlorine Residual	ppm	[4.0]	[4.0]	Range Highest RAA	Distribution System-wide: Distribution System-wide:			1.5 - 2.8 2.4		Drinking water disinfectant added for treatment
Bromate (k)	ppb	10	(0)	Range Highest RAA	NA NA	NA NA	4.8 - 8.8 NA	NA NA	3.6 - 9.7 8.4	Byproduct of drinking water ozonation
DBP Precursor Control (TOC) (l)	ppm	TT	NA	Range Average	TT TT	TT TT	TT TT	TT TT	TT TT	Various natural and man-made sources

## E SECONDARY STANDARDS - Aesthetic Standards

Aluminum (f)	NA	1000	600	Range Average	ND - 82 ND	ND - 123 ND	ND - 118 55	ND - 151 73	ND - 83 52	Residue from water treatment process; natural deposits; erosion
Chloride	ppm	500	NA	Range Average	63 - 85 75	67 - 85 77	47 - 65 52	83 - 92 88	42 - 88 60	Runoff/leaching from natural deposits; seawater influence
Color	Units	15	NA	Range Average	1 - 3 2	1 - 2 2	1 - 4 2	1 - 3 2	1 - 2 1	Naturally occurring organic materials
Corrosivity (l)	SI	non-corrosive	NA	Range Average	0.18 - 0.52 0.30	0.15 - 0.39 0.27	0.05 - 0.25 0.14	0.04 - 0.60 0.38	-0.12 - 0.19 0.09	Elemental balance in water affected by temperature, other factors
Odor Threshold (m)	Units	3	NA	Range Average	3 3	2 2	2 2	2 2	2 2	Naturally occurring organic materials
Specific Conductance	μS/cm	1600	NA	Range Average	670 - 876 766	734 - 871 792	477 - 564 525	687 - 938 854	380 - 623 480	Substances that form ions in water; seawater influence
Sulfate	ppm	500	NA	Range Average	134 - 206 164	151 - 202 171	55 - 102 82	103 - 210 173	40 - 92 62	Runoff/leaching from natural deposits; industrial waste
Total Dissolved Solids (TDS)	ppm	1000	NA	Range Average	391 - 532 442	426 - 528 468	270 - 328 302	386 - 554 501	209 - 344 269	Runoff/leaching from natural deposits; seawater influence
Turbidity (Monthly) (a)	NTU	5	NA	Range Average	0.05 - 0.07 0.06	0.05 - 0.07 0.06	0.04 - 0.06 0.05	0.06 - 0.08 0.07	0.05 0.05	Soil runoff