Three Valleys Municipal Water District 2012 WATER QUALITY REPORT TO TVMWD MEMBER AGENCIES

WEYMOUTH refers to the Metropolitan Water District's Weymouth Water Treatment Plant in the city of La Verne MIRAMAR refers to the Three Valleys Municipal Water District's Miramar Water Treatment Plant in the city of Claremont. **REGULATORY STANDARDS** WEYMOUTH MIRAMAR EFFLUENT EFFLUENT Range/Average Range/Average State MCL PHG State DLR Major Sources in Drinking Water [MRDL] (MCLG) [MRDLG] SOURCE WATER % of State Project Water 7%-99%/46% 95.96% NA NA NA 4.04% % of Ground PRIMARY STANDARDS - Mandatory Health-Related Standards CLARITY Combined Filter Effluent Turbidity NTU 0.04 (highest) 0.10 (highest) TT=1 NA NA Soil runoff (a) TT (a) 100% 100% % ≤ 0.3 MICROBIOLOGICAL Total Coliform Bacteria (b) % ND-0.5/0.1 ND-1.2/ND 5.0 (0) NA Naturally present in the environment Human and animal fecal waste Fecal Coliform/E.coli (c) ND NA ND (C) (0) (c) distrib CFU/ mL Heterotrophic Plate Count ТΤ TT TI NA NA laturally present in the environment Cryptosporidium Oocys ND ND TT (0) NA Human and animal fecal waste 200 L ND ND TT NA luman and animal fecal waste Giardia (0) Cysts 2001 ORGANIC CHEMICALS Pesticides/PCBs Units Alachlor ND ND 2 4 Runoff from herbicide used on row crops ppb 1 ND 0.15 0.5 Runoff from herbicide used on row crops and along Atrazine daa ND 1 highways Runoff/leaching from herbicide used on rice, alfalfa, ND ND 18 200 2 Bentazon ppb grapes Carbofuran ppb ND ND 18 1.7 5 eaching of soil fumigant used on rice, alfalfa and grape ND ND 30 100 Chlordane ppt 100 ND ND 70 20 Runoff from herbicide used on row crops, range land, 2,4-D ppb 10 wns Runoff from herbicide used on rights of way, crops and Dalapon ppb ND ND 200 790 10 Banned nematocide that may still be present in soils due Dibromochloropropane (DBCP) ND ND 200 1.7 10 ppt to runoff/leaching ND Runoff from herbicide used on soybeans, vegetables and Dinoseb ppb ND 7 14 2 ruits Runoff from herbicide used for terrestrial and aquatic Diguat ppb ND ND 20 15 4 unoff from herbicide used for terrestrial and aqu ND ND 100 580 45 Endothall ppb eeds Endrin ppb ND ND 2 1.8 0.1 Residue of banned insecticide and rodenticide 20 Discharge from petroleum refineries; underground gas ND ND 50 Ethylene dibromide (EDB) ppt 10 ank leaks off from herbicide us ND ND 700 900 25 Glyphosate ppb Heptachlor ppt ND ND 10 8 10 Residue of banned insecticide reakdown product of heptachlor Heptachlor Epoxide ppt ND ND 10 6 10 Lindane ppt ND ND 200 32 200 Runoff/leaching from insecticide used on cattle, lumber Runoff/leaching from insecticide uses Methoxychlor ppb ND ND 30 0.09 10 unoff/leaching from herbicide used on rice 20 ND ND 1 2 Molinate (Ordram) ppb ND 50 Oxamyl (Vydate) ND 26 20 ng from insecticide ι ppb Pentachlorophenol (PCP) ppb ND ND 1 0.3 0 2 Discharge from wood preserving factories & other sectio lerbicide runoff ND ND 500 500 Picloram ppb 1 Polychlorinated Biphenyls (PCBs) ppt ND ND 500 90 500 Runoff from landfills; discharge of waste chemicals lerbicide runoff ND ND 4 4 Simazine ppb 1 2,4,5-TP (Silvex) ppb ND ND 50 25 Residue of banned herbicide Runoff/leaching from herbicide used on rice Thiobencarb (d) ppb ND ND 70 70 1 ND ND 0.03 3 1 Toxaphene ppb Runoff/leaching from insecticide used on cotton and cattle Semi-Volatile Organic Chemicals NA TT NR TT NA dded to water during sewage/wastewater treatment Acrylamide (0) ND Leaching from linings of water storage tanks and ND 200 100 Benzo(a)pyrene ppt listribution mains arge from chemical factories ND ND 400 200 5 Di(2-ethylhexyl) adipate ppb ND ND Discharge from chemical factories: inert ingredient in Di(2-ethylhexyl) phthalate ppb 4 12 3 Vater treatment chemical impurities NA TT NR ΤТ (0) NA Epichlorohydrin Discharge from metal refineries & agrichemical factories; Hexachlorobenzene ppb ND ND 1 0.03 0.5 vater chlorination reaction by-product Hexachlorocyclopentadiene ppb ND ND 50 50 1 Discharge from chemical factories Emissions from waste incineration; discharge from 2,3,7,8-TCDD (Dioxin) ND ND 30 0.05 5 ppq nemical factories

		WEYMOUTH FEELLIENT	MIRAMAR EFELLIENT	REGULATORY STANDARDS		NDARDS	
		Range/Average	Range/Average	State MCL [MRDL]	PHG (MCLG) [MRDLG]	State DLR	Major Sources in Drinking Water
SOURCE WATER							
% of State Project Water		7%-99%/46%	95.96%	NA	NA	NA	
% of Groundwater PRIMARY STANDARDS - Man	datory	Health-Related Sta	4.04% Indards				
Volatile Organic Chemicals	ppb	ND	ND	1	0.15	0.5	1
Corbon Totrophorido	ppp	ND	ND	500	100	0.5 500	Plastic factory discharge; gas tanks and landfill leaching
	ppt	ND	ND	500	100	500	activities
1,2-Dichlorobenzene	ppp	ND	ND	600	600	0.5	
1,4-Dichlorobenzene	aqq	ND	ND	5	6	0.5	
1,1-Dichloroethane	ррь	ND	ND	5	3	0.5	Extraction & degreasing solvent; tumigant
1,2-Dichloroethane	ppt	ND	ND	500	400	500	
1,1-Dichloroethylene	ppb	ND	ND	6	10	0.5	Discharge from industrial chemical factories
cis-1,2-Dichloroethylene	ppb	ND	ND	6	100	0.5	Industrial chemical factory discharge; biodegradation byproduct of TCE/PCE groundwater contamination
trans -1,2-Dichloroethylene	ppb	ND	ND	10	60	0.5	Industrial chemical factory discharge; biodegradation byproduct of TCE/PCE groundwater contamination
Dichloromethane (methylene chloride)	ppb	ND	ND	5	4	0.5	Discharge from pharmaceutical and chemical factories
1,2-Dichloropropane	ppb	ND	ND	5	0.5	0.5	Discharge from industrial chemical factories; primary component of some fumigants
1,3-Dichloropropene	ppt	ND	ND	500	200	500	Runoff/leaching from nematocide used on croplands
Ethylbenzene	ppb	ND	ND	300	300	0.5	Discharge from petroleum refineries; industrial chemical
Methyl-tert -butyl-ether (MTBE)	ppb	ND	ND	13	13	3	factories Leaking underground storage tanks; discharge from
(d,e) Monochlorobenzene	nnh	ND	ND	70	200	0.5	petroleum and chemical factories Discharge from industrial, agricultural chemical factories
Styrene	nnh	ND	ND	100	0.5	0.5	and dry-cleaning facilities
1 1 2 2 Totrachloroothano	ppb	ND	ND	100	0.5	0.5	from landfills
	ppp	ND	ND	-	0.1	0.5	solvent used in productions of TCE
	ppp	ND	ND	5	0.06	0.5	(metal degreaser)
loluene	ррр	ND	ND	150	150	0.5	Underground gas tank leaks
1,2,4-Trichlorobenzene	ppb	ND	ND	5	5	0.5	Discharge from textile-finishing factories
1,1,1-Trichloroethane	ppb	ND	ND	200	1000	0.5	Discharge from metal degreasing sites; manufacture of food wrappings
1,1,2-Trichloroethane	ppb	ND	ND	5	0.3	0.5	Discharge from industrial chemical factories
Trichloroethylene (TCE)	ppb	ND	ND	5	1.7	0.5	Discharge from metal degreasing sites and other factories
Trichlorofluoromethane (Freon 11)	ppb	ND	ND	150	700	5	Discharge from industrial factories; degreasing solvent; propellant and refrigerant
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ppm	ND	ND	1.2	4	0.01	Discharge from metal degreasing sites and other factories; dry-cleaning solvent; refrigerant
Vinyl chloride	ppt	ND	ND	500	50	500	Leaching from PVC piping; plastics factory discharge; biodegradation byproduct of TCE/PCE groundwater
Xylenes	ppm	ND	ND	1.75	1.8	0.0005	Discharge from petroleum and chemical refineries; fuel solvent
INORGANIC CHEMICALS	nnh	ND-210/120	ND	1000	600	50	Residue from water treatment process: erosion of natural
	ppp	ND-210/120	ND	1000	20	50	deposits
America	ppp	ND	ND	0	20	0	electronics
Arsenic	ppp	ND	ND	- 10	0.004	2	wastes
Asbestos	MFL	ND	ND	1	/	0.2	natural deposits
Barium	ррр	ND	ND	1000	2000	100	Discharge of oil drilling wastes and from metal refinences; erosion of natural deposits
Beryllium	ррь	ND	ND	4	1	1	defense industries
Cadmium	ррь	ND	ND	5	0.04	1	deposits; runoff from waste batteries and paints
Chromium	ppb	ND	ND	50	(100)	10	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits
Copper (d, k)	ppm	ND	ND	AL=1.3	0.3	0.05	Internal corrosion of household pipes; erosion of natural deposits; leaching from wood preservatives
Cyanide	ppb	ND	ND	150	150	100	Discharge from steel/metal, plastic and fertilizer factories
Fluoride (j)	ppm	0.6-1.1/0.8 (treatment related)	0.14 (naturally occurring)	2	1	0.1	Erosion of natural deposits; water additive that promotes strong teeth
Lead (k)	ppb	ND	ND	AL=15	0.2	5	Internal corrosion of household pipes erosion of natural deposits
Mercury	ppb	ND	ND	2	1.2	1	Erosion of natural deposits; discharge from factories; runoff from landfills
Nickel	ppb	ND	ND	100	12	10	Erosion of natural deposits; discharge from metal factories
Nitrate (as N) (g)	ppm	ND	0.6-0.75/0.45	10	10	0.4	Runoff & leaching from fertilizer use; leaching from sewage; erosion of natural deposits
Nitrite (as N)	ppm	ND	ND	1	1	0.4	Runoff & leaching from fertilizer use; leaching from sewage; erosion of natural deposits
Perchlorate	ppb	ND	ND	6	6	4	Inorganic chemical used in rocket propellant, fireworks, explosives
Selenium	ppb	ND	ND	50	30	5	Discharge from petroleum refineries, mines; erosion of natural deposits
Thallium	ppb	ND	ND	2	0.1	1	Leaching from ore-processing sites; discharge from electronics factories
RADIOLOGICALS (r) (s)							
Gross Alpha Particle Activity	pCi/L	ND-3/ND	ND	15	(0)	3	Erosion of natural deposits
Gross Beta Particle Activity (h)	pCi/L	ND-6/4	ND	50	(0)	4	Decay of natural and man-made deposits
Combined Radium (i)	pCi/L	ND	ND	5	(0)	NA	Erosion of natural deposits
Radium 226	pCi/L	ND	ND	NA	0.05	1	Erosion of natural deposits
Radium 228	pCi/L	ND	ND	NA	0.019	1	Erosion of natural deposits
Strontium-90	pCi/L	ND	0.093	8	0.35	2	Decay of natural and man-made deposits
Tritium	pCi/L	ND	ND	20,000	400	1,000	Decay of natural and man-made deposits
Uranium	pCi/L	1-2/2	ND	20	0.43	1	Erosion of natural deposits

		WEYMOUTH		REGULATORY STANDARDS		NDARDS	
		Range/Average	Range/Average	State MCL	PHG	State DLR	Major Sources in Drinking Water
				[MRDL]	(MCLG) [MRDLG]		
SOURCE WATER							
% of State Project Water % of Groundwater		7%-99%/46%	95.96% 4.04%	NA	NA	NA	
DISINFECTION BY-PRODUCTS, D	ISINFE	CTANT RESIDUALS,	AND DISINFECTION	BY-PRODUC	TS PRECUR	SORS	
Total Trihalomethanes (TTHM) (m)	ppb	7.6-70/35	37.1-57/47.8	80	NA	1	By-product of drinking water disinfection
Haloacetic Acids (HAA5) (m)	ppb	Distribution system-wide	Distribution system-wide 11.0-24.6/17.3	60	NA	1	By-product of drinking water disinfection
Total Chlorine Residual	ppm	Distribution system-wide	Distribution system-wide	[4.0]	[4.0]	NA	Drinking water disinfectant added for treatment
DBP Precursor Control (TOC) (q)	ppm	Distribution system-wide	1.3-2.1/1.6	тт	NA	0.30	Various natural and man-made sources
SECONDARY STANDARDS - A	esthet	ic Standards					
Aluminum (d)	ppb	ND-210/120	ND	200	600	50	Residue from water treatment processes; natural deposits, erosion
Chloride	ppm	85-95/90	83	500	NA	NA	Runoff/leaching from natural deposits; seawater influence
Color	units	1	ND	15	NA	NA	Naturally occurring organic materials
Copper (d, f)	ppm	ND	ND	1	0.3	0.05	erosion; wood preservatives leaching
Foaming Agents-MBAS	ррр	ND	ND	500	NA	NA	Municipal and industrial waste discharges
Iron	ppb	ND	ND	300	NA	100	Leaching from natural deposits; industrial wastes
Manganese	ppb	ND	ND	50	NL=500	20	Leaching from natural deposits
Methyl tert-butyl-ether (MTBE) (d,e)	ppb	ND	ND	5	13	3	Gasoline discharges from watercraft engines
Odor Threshold (f)	TON	2	1	3	NA	1	Naturally occurring organic materials
Silver	ppb	ND	ND	100	NA	10	
Specific Conductance	µS/cm	350-930/740	510-530/520	1,600	NA	NA	Substances that form ions when in water; seawater influence
Sulfate	ppm	130-160/140	39	500	NA	0.5	Runoff/leaching from natural deposits; industrial wastes
Thiobencarb (d)	ppb	ND	ND	1	70	1	Runoff/leaching from rice herbicide
Total Dissolved Solids	ppm	450-490/470	310-320/315	1,000	NA	NA	Runoff/leaching from natural deposits; seawater influence
Turbidity (Monthly) (a)	NTU	ND	0.1	5	NA	NA	Soil runoff
Zinc	ppm	ND	ND	5.0	NA	0.05	Runoff/leaching from natural deposits; industrial wastes
FEDERAL UNREGULATED CC List 1 - Assessment Monitoring	ONTAN	Feb 2009 - Aug 2009	ING RULE (UCMR2 Apr 2009 - Jan 2010) (p)			
Dimethoate	ppb	ND	ND	NA	NA	0.7	Runoff from insecticide used on crops and residential uses
Terbos sulfone	ppb	ND	ND	NA	NA	0.4	Runoff/leaching from breakdown products of terbufos
2,2',4,4'-tetrabromodiphenyl ether	ppb	ND	ND	NA	NA	0.3	Discharge from industrial chemical factories; use of flame retardant additives
2,2',4,4',5-pentabromodiphenyl ethe	ppb	ND	ND	NA	NA	0.9	Discharge from industrial chemical factories; use of flame retardant additives
2,2'4,4'5,5'-hexabromobiphenyl	ppb	ND	ND	NA	NA	0.7	Discharge from industrial chemical factories; use of flame
2,2',4,4',5,5'-hexabromodiphenyl eth	ppb	ND	ND	NA	NA	0.8	Discharge from industrial chemical factories; use of flame retardant additives
2,2',4,4',6-pentabromodiphenyl ethe	ppb	ND	ND	NA	NA	0.5	Discharge from industrial chemical factories; use of flame
1,3-dinitrobenzene	ppb	ND	ND	NA	NA	0.8	Runoff/residue from explosives, by-product of TNT, used
2,4,6-trinitroluene (TNT)	ppb	ND	ND	NA	NA	0.8	Runoff/residue from explosives, propellants; chemical
Hexahydro-1,3,5-trinitro-1,3,5-	ppb	ND	ND	NA	NA	1.0	Runoff/residue from explosives, fireworks and demolition
		Ech 2000 Aug 2000	Apr 2000 Jon 2010				
Acetochlor	ppb	ND	ND	NA	NA	2.0	Herbicide runoff
Alachlor	ppb	ND	ND	NA	NA	2.0	Herbicide runoff
Metolachlor	ppb	ND	ND	NA	NA	1.0	Harbielde runoff from wood opptral, grone regidential woo
Acetochlor ethane sulfonic acid	ppb	ND	ND	NA	NA	1.0	Degradation product of acetochlor
Acetochlor oxanilic acid	ppb	ND	ND	NA	NA	2.0	Degradation product of acetochlor
Alachlor ethane sulfonic acid	ppb	ND	ND	NA	NA	1.0	Degradation product of alachlor
Alachlor oxanilic acid	ppb	ND	ND	NA	NA	2.0	Degradation product of alachlor
Metolachlor ethane sulfonic acid	ppb	ND	ND	NA	NA	1.0	Degradation product of metolachlor
Metolachlor oxanilic acid	ppb	ND	ND	NA	NA	2.0	Degradation product of metolachlor
N-nitrosodiethylamine (NDEA)	ppb	ND	ND	NA	NA	0.005	By-product of drinking water chloramination; industrial
N-nitrosodimethylamine (NDMA)	ppb	ND-0.003/ND	ND	NA	NA	0.002	processes By-product of drinking water chloramination; industrial
N-nitroso-di-n-butylamine (NDBA)	ppb	ND	ND	NA	NA	0.004	processes By-product of drinking water chloramination; industrial
N-nitroso-di-n-propylamine (NDPA)	ppb	ND	ND	NA	NA	0.007	processes By-product of drinking water chloramination; industrial
N-nitrosomethylethylamine (NMEA)	ppb	ND	ND	NA	NA	0.003	processes By-product of drinking water chloramination; industrial
N-nitrosopyrrolidine (NPYR)	ppb	ND	ND	NA	NA	0.002	By-product of drinking water chloramination; industrial

	WEYMOUTH MIRAMAR EFFLUENT EFFLUENT		REGULATORY STANDARDS			
	Range/Average	Range/Average	State MCL [MRDL]	PHG (MCLG) [MRDLG]	State DLR	Major Sources in Drinking Water
SOURCE WATER	70/ 000/ /460/	05.00%	NA	NIA	NA	
% of State Project Water % of Groundwater	7%-99%/46%	95.96% 4.04%	NA	NA	NA	

OTHER PARAMETERS							
Alkalinity	ppm	61-120/95	78-94/86	NA	NA	NA	Measure of water quality
Boron	ppb	130	130-140/135	NL=1,000	NA	100	Runoff/leaching from natural deposits; industrial wastes
Calcium	ppm	45-48/46	28	NA	NA	NA	Measure of water quality
Chlorate (m)	ppb	66	ND	NL=800	NA	20	By-product of drinking water chlorination; industrial processes
Chromium VI (I)	ppb	ND	ND	NA	0.02	1	Industrial waste discharge; could be naturally present as well
Corrosivity (o) (as Aggressiveness Index)	AI	12.1	12.22	NA	NA	NA	Elemental balance in water; affected by temperature, other factors
Corrosivity (n) (as Saturation Index)	SI	0.24-0.32/0.28	0.4	NA	NA	NA	Elemental balance in water; affected by temperature, other factors
Hardness (total)	ppm	80-270/200	110	NA	NA	NA	Measure of water quality
Magnesium	ppm	19-20/20	13	NA	NA	NA	Measure of water quality
рН	pH units	7.9-8.6/8.1	8.2-8.4/8.3	NA	NA	NA	Measure of water quality
Potassium	ppm	3.7-4.1/3.9	2.2-2.9/2.55	NA	NA	NA	Measure of water quality
Radon	pCi/L	ND	NA	NA	NA	100	Naturally occurring, comes from decay of uranium in nearly all soils
Sodium	ppm	74-82/78	57	NA	NA	NA	Measure of water quality
Total organic carbon (TOC)	ppm	1.8-2.6/2.3	1.3-2.1/1.6	TT	NA	0.30	Various natural and man-made sources
Vanadium	ppb	ND	ND-3.1/1.55	NL=50	NA	3	Naturally occurring; industrial waste discharge
N-Nitrosodimethylamine (NDMA)	ppb	ND-2.5	ND	NL=10	3	2	By-product of drinking water chlorination; industrial processes
Dichlorodifluoromethane (Freon 12)	ppb	ND	ND	NL=1,000	NA	0.5	Industrial waste discharge
Ethyl-tert-butyl-ether (ETBE)	ppb	ND	ND	NA	NA	3	Used as gasoline additive
tert-Amyl-methyl-ether (TAME)	ppb	ND	ND	NA	NA	3	Used as gasoline additive
tert-Butyl alcohol (TBA)	ppb	ND	ND	NL=12	NA	2	MTBE breakdown product; used as gasoline additive
Trichloropropane (1,2,3-TCP)	ppb	NC	ND	NL=.005	0.0007	0.005	Industrial waste discharge and pesticide uses

KEY TO	ABBREVIATIONS		
AL	= Action level	NR	= Not Required
CFU/ml	= Colony Forming Units per milliliter	NTU	= Nephelometric Turbidity Units
DBP	= Disinfection By-Products	pCi/L	= PicoCuries per liter
DLR	= Detection Limits for Purposes of Reporting	PHG	= Public Health Goal
MCL	= Maximum Contaminant Level	ppb	= parts per billion/micrograms per liter (ug/L)
MCLG	= Maximum Contaminant Level Goal	ppm	= parts per million/milligrams per liter (mg/L)
MFL	= million fibers per liter	ppq	= parts per quadrillion (pg/L)
MRDL	= Maximum Residual Disinfectant Level	ppt	= parts per trillion/nanograms per liter (ng/L)
MRDLG	= Maximum Residual Disinfectant Level Goal	RAA	= Running Annual Average; highest RAA is the highest of all Running Annual Averages calculated as
MPN	= Most Probable Number		average of all the samples collected within a twelve-month period.
NA	= Not Applicable	Si	= Saturation Index (Langelier)
NC	= Not Collected	TON	= Threshold Odor Number
ND	= None Detected	TT	= Treatment Technique
NL	= Notification Level		

a) The turbidity level of the filtered water shall be less than or equal to 0.3 NTU in 95% of the measurements taken each month and shall not exceed 1.0 NTU at anytime. Turbidity is a measure of the cloudiness of water and is a good indicator of the water quality and filtration performance. The averages and ranges of turbidity shown in the Secondary Standards were based on the treatment plant effluent. Per 2012 Consumer Confidence Report Guidance, the state DLR for turbidity is 0.1 NTU.

b) Total coliform MCLs: No more than 5.0% of the monthly samples may be total coliform positive. Compliance is based on the combined distribution system. sampling. In 2012, 8,037 samples were analyzed from MWD (6 samples were positive for total coliforms) and 834 samples were analyzed from TVMWD (1 samples were positive for total coliform). The MCL was not violated.

E. coli MCL: The occurrence of two consecutive total coliform-positive samples, one of which contained E. coli, constitutes an acute MCL violation. The MCL was not violated. Aluminum, Thiobencarb, Copper and MTBE have both primary and secondary standards.

 d)
 Aluminum, Thiobencarb, Copper and MTE

 e)
 MTBE reporting level for MWD is 0.5 ppb.

C)

r)

s)

Metropolitan has developed a flavor-profile analysis method that can more accurately detect odor occurrences. For more information contact TVMWD.

 f)
 Metropolitan has developed a flavor-profile analysis method that

 g)
 State MCL is 45 mg/L as Nitrate, which equals 10 mg/L as N.

h) The gross beta particle activity MCL is 4 millirem/year annual dose equivalent to the total body or any internal organ. The screening level is 50 pCi/L.

i) Standard is for Radium-226 and -228 combined.

MWD and TVMWD were in compliance with all provisions of the State's Fluoridation System Requirements.

As a wholesaler, MWD and TVMWD are not required to collect samples at the consumers' tap under the Lead and Copper Rule

k) As a wholesaler, MWD and TVMWD are not requir b) Chromium VI reporting level for MWD is 0.03 ppb.

m) In 2012, TVMWD was in compliance with all provisions of the both the Stage 1 and Stage 2 Disinfection/Disinfection By-Products (D/DBP) Rule. From the 4 quarterly distribution samples collected, the running annual average for TTHM was 47.8 ppb and 17.3 ppb for HAA5. Stage 2 of the D/DBPR monitoring began in the 2nd quarter of 2012. Compliance was based on the RAA.

n) SI measures the tendency for a water to precipitate or dissolve calcium carbonate (a natural mineral in water). Water with SI <-2.0 is highly corrosive and would be corrosive to almost all materials found in a typical water system. SI between -2.0 to 0 indicates a balanced water and SI >0.5 is scale forming.

o) Al measures the aggressiveness of water transported through pipes. Water with Al <10.0 is highly aggressive and would be very corrosive to almost all materials found in a typical water system. Al ≥ 12.0 indicates non-aggressive water. Al between 10.0 and 11.9 indicates moderately aggressive water.</p>

p) Minimum reporting levels are as stipulated in the Federal UCMR 2. List 1 - Assessment Monitoring consists of 10 chemical contaminants for which standard analytical methods were available List 2 - Screening Survey consists of 15 contaminants for which new analytical methods were used. All analysis conducted by contract laboratories. Values listed in State DLR column are Federal minimum reporting levels.

q) Enhanced Coagulation is the optimization of coagulant doses and pH levels to improve precursor removal. If a water system removes specific percentages of TOCs from the source water, its coagulation processes will be considered "enhanced." The levels of finished water TOC removal that are required for a system, based on source water alkalinity and TOC levels, are known as "Step 1." If a conventional filtration plant meets Step 1, they are meeting the TOC removal requirements, practicing enhanced coagulation, and meeting the ultimate goal of the DBP Rule, which is precursor removal.

Data collected (triennially) from four consecutive quarters of monitoring in 2012 and reported for three years until the next samples are collected.

Gross Alpha Beta Particle Activity, Radium 226, Radium 228, Combined Radium and Uranium are required once every nine years. Strontium and Tritium are required annually and Gross Beta is required quarterly on an annual basis.