

MDE MONITORING PARAMETERS - TABLE I

Volatile Organic Compound Monitoring Parameters	Units	PQL	MCL	NCTS	Cleanup STD
Acetone	µg/L	5.0			1400
Acrylonitrile	µg/L	5.0		0.51	
Benzene	µg/L	1.0	5.0	22	5.0
Bromochloromethane	µg/L	1.0			
Bromomethane	µg/L	1.0			0.75
2-Butanone	µg/L	5.0			560
Carbon disulfide	µg/L	1.0			81
Carbon tetrachloride	µg/L	1.0	5.0	2.3	5.0
Chlorobenzene	µg/L	1.0	100	130	100
Chloroethane	µg/L	1.0			
Chloromethane	µg/L	1.0			19
1,2-Dibromo-3-chloropropane; (DBCP)	µg/L	0.04	0.2		0.20
1,2-Dibromoethane; (EDB)	µg/L	0.04	0.05		0.050
Dibromomethane	µg/L	1.0			
1,2-Dichlorobenzene	µg/L	1.0	600	420	
1,4-Dichlorobenzene	µg/L	1.0	75	63	
<i>trans</i> -1,4-Dichloro-2-butene	µg/L	5.0			
1,1-Dichloroethane	µg/L	1.0			2.8
1,2-Dichloroethane	µg/L	1.0	5.0	3.8	5.0
1,1-Dichloroethene	µg/L	1.0	7.0	330	7.0
<i>cis</i> -1,2-Dichloroethene	µg/L	1.0	70		70
<i>trans</i> -1,2-Dichloroethene	µg/L	1.0	100	140	100
Methylene chloride	µg/L	1.0	5.0	46	5.0
Methyl <i>tert</i> -butyl ether; (MTBE)	µg/L	2.0			20
1,2-Dichloropropane	µg/L	1.0	5.0	5.0	5.0
<i>trans</i> -1,3-Dichloropropene	µg/L	1.0			
<i>cis</i> -1,3-Dichloropropene	µg/L	1.0			
Ethylbenzene	µg/L	1.0	700	530	700
2-Hexanone	µg/L	5.0			
Iodomethane	µg/L	1.0			
4-Methyl-2-pentanone	µg/L	5.0			630
Styrene	µg/L	1.0	100		100
1,1,1,2-Tetrachloroethane	µg/L	1.0			
1,1,2,2-Tetrachloroethane	µg/L	1.0		1.7	0.076
Tetrachloroethene; (PCE)	µg/L	1.0	5.0	6.9	5.0
Toluene	µg/L	1.0	1000	1300	1000
1,1,1-Trichloroethane	µg/L	1.0	200	200	200
1,1,2-Trichloroethane	µg/L	1.0	5.0	5.9	5.0
Trichloroethene; (TCE)	µg/L	1.0	5.0	25	5.0
Trichlorofluoromethane; (CFC-11)	µg/L	1.0			
1,2,3-Trichloropropane	µg/L	1.0			
Vinyl acetate	µg/L	1.0			
Vinyl chloride	µg/L	1.0	2.0	0.25	2.0
<i>o</i> -Xylene	µg/L	1.0	10,000		10,000
<i>m</i> -+ <i>p</i> -Xylenes	µg/L	1.0	(total)		
Bromodichloromethane	µg/L	1.0			80
Dibromochloromethane	µg/L	1.0	80 (total)	80 (total)	80
Bromoform	µg/L	1.0			80
Chloroform	µg/L	1.0			80

PQL = Practical Quantitation Limit

MCL = Maximum Contaminant Level

NCTS = Numerical Criteria for Toxic Substances in Surface Waters

Cleanup STD = MDE Cleanup Standards for Groundwater

MDE MONITORING PARAMETERS - TABLE I (cont.)

Per- and Polyfluoroalkyl Substances (PFAS)	Units	PQL	MCL	HI MCL ¹	HBWC
Perfluorooctanoic acid (PFOA)	ng/L	2.0	4.0		
Perfluorooctanesulfonic acid (PFOS)	ng/L	2.0	4.0		
Perfluorononanoic acid (PFNA)	ng/L	2.0		1.0 (unitless)	10
Perfluorohexanesulfonic acid (PFHxS)	ng/L	2.0			9.0
Perfluorobutanesulfonic acid (PFBS)	ng/L	2.0			2000
Hexafluoropropylene oxide dimer acid (HFPO-DA; GenX)	ng/L	2.0			10

PQL = Practical Quantitation Limit (Method 1633)

MCL = Maximum Contaminant Level

HI MCL = Hazard Index MCL

HBWC = Health Based Water Concentrations

Note:

1 – A running annual average hazard index value greater than 1.0 is a violation of the HI MCL.

Formula: Hazard Index Value = (GenX ng/L)/(10 ng/L) + ((PFBS ng/L)/(2000 ng/L)) + ((PFNA ng/L)/(10 ng/L)) + ((PFHxS ng/L)/(9 ng/L))

MDE MONITORING PARAMETERS - TABLE II

Elements & Indicator Monitoring Parameters	Units	PQL	MCL	NCTS ¹	Cleanup STD
Total Antimony	µg/L	2	6	5.6	6.0
Total Arsenic	µg/L	2	10	0.18	10
Total Barium	µg/L	10	2000	1000	2000
Total Beryllium	µg/L	2	4	4.0	4.0
Total Cadmium	µg/L	4	5	0.25	5.0
Total Calcium*	µg/L	80			
Total Chromium	µg/L	10	100	100	100
Total Cobalt*	µg/L	10			
Total Copper ⁺	µg/L	10	1300 (AL)	9	1300
Total Iron**	µg/L	5	300		1400
Total Lead	µg/L	2	15 (AL)	2.5	15
Total Magnesium*	µg/L	4			
Total Manganese**	µg/L	10	50		43
Total Mercury	µg/L	0.2	2	0.77	2.0
Total Nickel ⁺	µg/L	11	100	52	39
Total Potassium*	µg/L	390			
Total Selenium	µg/L	35	50	5	50
Total Silver**	µg/L	10	100	3.2	9.4
Total Sodium*	µg/L	200			
Total Thallium	µg/L	2	2	0.24	2.0
Total Vanadium*	µg/L	10			8.6
Total Zinc**	µg/L	10	5000	120	600
Alkalinity*	mg/L	1.0			
Ammonia (as N)*	mg/L	1.0		See note ²	
Chemical oxygen demand*	mg/L	10			
Chloride**	mg/L	0.39	250		
Hardness*	mg/L	0.50			
Nitrate (as N)	mg/L	0.06	10		
pH**	SU	0.1	6.5-8.5		
Specific conductance*	µS/cm	1.0			
Sulfate**	mg/L	0.38	250		
Total dissolved solids**	mg/L	10	500		
Turbidity	NTU	0.11	5		

Primary MCL
* = No MCL
** = Secondary MCL
+ = No MCL but recommended level by EPA

AL = Action Level
 Cleanup STD = MDE Cleanup Standards for Groundwater
 MCL = Maximum Contaminant Level
 NCTS = Numerical Criteria for Toxic Substances in Surface Waters
 NTU = Nephelometric Turbidity Unit
 PQL = Practical Quantitation Limit
 SU = Standard Unit (logarithmic unit)

Note:
 1 - Per COMAR 26.08.02.03-2F(1) - The metals shall be measured as dissolved metal ...
 2 - See COMAR 26.08.02.03-2 for ammonia