

Monmouth System - PWS ID# NJ1345001

Table of Detected Contaminants - 2007

Towns Served by this system: Shrewsbury area of system-Aberdeen, Allenhurst, Asbury Park, Bradley Beach, Colts Neck in part, Deal, Eatontown, Elberon, Fair Haven, Highlands Borough, Holmdel, Interlaken, Little Silver, Loch Arbor, Long Branch, Middletown, Monmouth Beach, Neptune, Neptune City, Ocean Grove, Oceanport, Ocean Township, Red Bank, Rumson, Sea Bright, Shrewsbury Borough, Shrewsbury Township, Tinton Falls, Wanamassa, West Long Branch

Lakewood/Howell area of system-Freehold in part, Howell Township, Lakewood: Ocean County area of system-Bay Head, Brick Township in part, Dover in part, Lavallette in part, Mantoloking

Those substances not listed in this table were not found in the treated water supply.

Regulated Substances ¹							
Contaminant	Units	MCL	MCLG	Range Detected	Highest Level Detected	Compliance Achieved	Typical Source
Microbiology							
Total coliform	cfu	coliform detected no more than 5% of monthly samples	0	NA	1.16 % ²	Yes	Naturally present in environment
Fecal Coliform and E. Coli	cfu	positive routine followed by a positive repeat	0	ND to 1	1 positive sample	Yes	Human and animal fecal waste
Inorganic Chemicals							
Arsenic	ppb	5	0	ND to 1	1	Yes	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium	ppm	2	2	0.011 to 0.072	0.072	Yes	Erosion of natural deposits
Fluoride ³	ppm	4	4	ND to 0.3	0.3	Yes	Erosion of natural deposits; Water additive which promotes strong teeth
Nitrate	ppm	10	10	ND to 0.02	0.02	Yes	Runoff from fertilizer use; industrial or domestic wastewater discharges; erosion of natural deposits
Selenium	ppb	50	50	ND to 3	3	Yes	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
Treatment Byproducts							
Total Trihalomethanes [TTHMs]	ppb	80	NA	15 to 93.2	54.6 ⁴	Yes	By-product of drinking water disinfection
Five Haloacetic Acids [HAA5]	ppb	60	NA	5.5 to 24.8	14.7 ⁴	Yes	By-product of drinking water disinfection
Turbidity							
Turbidity *	ntu	TT	NA	0.06 to 0.18	0.18	Yes	Soil runoff
Treatment Byproducts Precursor Removal							
Total Organic Carbon	ppm	TT	NA	1.28 to 2.32	2.32	Yes	Naturally present in the environment
Disinfectants							
Chlorine	ppm	MRDL = 4	MRDLG = 4	0.01 to 1.97	1.97	Yes	Water additive used to control microbes
Chlorite ¹¹	ppm	1	0.8	ND to 0.52	0.52	Yes	By-product of drinking water disinfection
Chlorine Dioxide ¹²	ppb	MRDL=800	MRDLG=800	ND to 163	163	Yes	Water additive used to control microbes
Radiological Substances							

Alpha Emitters ¹⁰	pCi/L	15	0	ND to 11.2	11.2	Yes	Erosion of natural deposits
Combined Radium 226 and 228	pCi/L	5 ⁵	0	ND to 4.9	4.9	Yes	Erosion of natural deposits
Tap water samples were collected for lead and copper analysis from homes in the service area							
Contaminant	Units	Action Level	MCLG	Amount Detected (90th%tile)	Homes Above Action Level	Compliance Achieved?	Typical Source
Copper	ppm	1.3	1.3	0.182	none	Yes	Corrosion of household plumbing systems
Lead	ppb	15	0	12	5	Yes	Corrosion of household plumbing systems
*Turbidity is a measure of the cloudiness of the water. 100% of the turbidity readings were below the treatment technique requirement of 0.3 ntu. We monitor it because it is a good indicator of the effectiveness of our filtration system.							

Secondary Contaminants			
Contaminant	Units	RUL	Amount Detected
Iron ⁷	ppm	0.3	ND to 0.29
Manganese ⁸	ppm	0.05	ND to 0.058
Sodium ⁹	ppm	50	3 to 32
Hardness	ppm	250	48 to 112

FOOTNOTES

¹ Under a waiver granted by the State of New Jersey Department of Environmental Protection, our system does not have to monitor for synthetic organic chemicals/pesticides because several years of testing have indicated that these substances do not occur in our source water. The SDWA regulations allow monitoring waivers to reduce or eliminate the monitoring requirements for volatile organic chemicals and synthetic organic chemicals. Our system received monitoring waivers for synthetic organic chemicals.

² Maximum percentage of positive samples collected in any one month.

³ Fluoride is added to the water (Shrewsbury and Ocean County areas of Monmouth System and Jamesburg)..

⁴ This level represents the highest annual quarterly average calculated from the data collected.

⁵ Radium 226 and Radium 228 have a combined MCL of 5 pCi/L

⁶ The State of New Jersey allows us to monitor for certain contaminants less than once a year because the concentrations are not expected to vary significantly from year to year. Some of the data, though representative, are more than one year old.

⁷ The recommended upper limit for iron is based on unpleasant taste of the water and staining of laundry. Iron is an essential nutrient, but some people who drink water with iron levels well above the recommended upper limit could develop deposits of iron in a number of organs of the body.

⁸ The recommended upper limit for manganese is based on staining of laundry. Manganese is an essential nutrient, and toxicity is not expected from high levels which would be encountered in drinking water.

⁹ For healthy individuals, the sodium intake from water is not important, because a much greater intake of sodium takes place from salt in the diet. However, sodium levels above the recommended upper limit may be of concern to individuals on a sodium restricted diet.

¹⁰ Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.

¹¹ Some infants and young children who drink water containing chlorite in excess of the MRDL could experience nervous system effects. Similar effects may occur in fetuses of pregnant women who drink water containing chlorite in excess of the MCL. Some people may experience anemia.

¹² Some infants and young children who drink water containing chlorine dioxide in excess of the MRDL could experience nervous system effects. Similar effects may occur in fetuses of pregnant women who drink water containing chlorine dioxide in excess of the MRDL. Some people may experience anemia.