Mount Laurel Township Municipal Utilities Authority Drinking Water Quality - Frequently Asked Questions

For a complete report of dectected contaminants, please refer to the current Water Quality Report on our <u>website</u>.

Where Does My Water Come From? - Your drinking water comes from a blend of sources.

- Mount Laurel MUA (MLTMUA) pumps water from three deep (600-700') wells within the lower Potomac-Raritan-Magothy (PRM) aquifer. This water is treated at our water treatment facility on Elbo Lane using a mixed media filter system with pH adjustment, chlorine disinfection and fluoridation. In 2004 a fourth MLTMUA well was converted from a supply source to an underground storage source using aquifer storage and recovery (ASR) technology.
- **Willingboro MUA** (WMUA) obtains all of its water from wells in the PRM aquifer and operates several water treatment facilities.
- NJ American Water Company (NJAWC) supplies water from three sources: Surface water from the Delaware River Delran Plant (majority of our purchase from NJAWC), and ground water wells from the PRM and Mount Laurel-Wenonah aquifers.

All water is distributed to our customers via MLTMUA's 200+ mile underground piping network. Due to the number of water supply source locations, interconnectivity of our distribution piping network and relative complexity of our purchase agreements, we are unable to definitively determine from which supply source you receive your water. You should assume that your water comes from a mixture of the sources listed above (MLTMUA, WMUA and NJAWC).

How much water do Mount Laurel MUA customers use? - On average, we deliver 4 million gallons per day to our customers, with historical peaks as high as 10 million gallons per day. Individual customer use varies based on personal habits, but average monthly use is around 6,000 gallons with increased use in the summer months for irrigation which can be substantial (>10,000 gallons/month).

Water Quality Compliance - The water in our system is tested year-round which includes daily operations sampling through compliance monitoring dictated by both state (NJDEP) and federal (USEPA) regulations. In all cases our water consistently meets all regulated parameters, confirming that the water as delivered to our customers is safe for use as potable water. We will continue to adapt to changes in water quality and regulatory requirements which protects all who use our water.

Why is there chlorine in my drinking water? - Without appropriate disinfection, your water could become harmful. According to the USEPA and health agencies (CDC, WHO, etc.) chlorine is currently one of the most effective disinfectants to kill harmful microorganisms. Chlorination has been named as one of the great modern medical advances of the 20th century. Sodium hypochlorite is added at the optimal level in order to comply with all state (NJDEP) and federal (USEPA) disinfection standards.

Do I need a water softener to reduce hardness? - The most apparent effect of hardness is seen in your water's ability to create soap foam. The optimal level for hardness in drinking water is 80-100 ppm Hardness of water from MLTMUA's treatment facilities and NJAWC is within this range; however, water received from WMUA ranges in hardness up to 130 ppm. Therefore, a water softener may be recommended for those in the northern areas of Mount Laurel.

Is there fluoride in my drinking water? - The optimal level of fluoride in drinking water recommended by the American Dental Association (ADA) is 0.70 ppm. Water supplied by MLTMUA and WMUA wells is fluoridated at 0.62 ppm. NJAWC does not fluoridate their water supply. Consult your pediatrician or dentist to determine if fluoride supplements are recommended.

Frequently Requested Water Quality Sampling Results (blended from all sources)

Parameter	Average or Range Detected	Comments
Fluoride (ppm)	ND-0.62	Naturally occurring from erosion of natural deposits MCL = 4.0 ppm, ADA recommends 0.70 ppm
Sodium (ppm)	14.6-28.5	Naturally occurring, byproduct of some types of disinfection Aesthetic Recommendation = 50 ppm
Iron (ppm)	ND-0.212	Naturally occurring in ground water Aesthetic Recommendation = 0.30 ppm
рН	7.0-7.9	pH is a measure of the acid/base properties of water Aesthetic Recommendation (Optimum range) 6.5-8.5
Total Hardness (as CaCO3) (ppm)	54-130	Naturally occurring calcium/magnesium content in water Aesthetic Recommendation = 250 ppm
Chlorine Residual (ppm)	0.71	Recommended water additive Residual Disinfectant Level in Distribution System Minimum 0.2 ppm – Maximum 4.0 ppm
Lead (90 th percentile result*) (ppb)	2	Corrosion of household plumbing Action Level >15 ppb
Nitrate (ppm)	ND-3.72	Erosion of natural deposits, fertilizers, human & animal wastes MCL = 10 ppm
Arsenic (ppb)	ND	Erosion of natural deposits, industrial/agricultural pollution MCL = 5 ppb

^{*}Compliance with Lead is based on no more than 10% of sample results being above the Action Level of 15 ppb not on a single sample result exceedance of the action level.

Definitions

- Aesthetic Recommendation (Secondary Standard) non-mandatory State (NJDEP) or Federal (USEPA)
 guidelines regarding contaminants that may cause cosmetic or aesthetic effects and are considered a
 nuisance by the USEPA
- MCL Maximum Contaminant Level the highest level of a contaminant allowed in drinking water under State (NJDEP) and Federal (USEPA) Regulations (Primary Standards)
- ND not detected
- ppm-one part per million is equal to one milligram per liter (mg/l), which is approximately the same as 1 second in 11.6 days
- ppb-one part per billion is equal to one microgram per liter $\mu g/l$, which is approximately the same as 1 second in 31.7 years