Annual Drinking Water Quality Report

2023 (2022 Data)

Manchester Township Water Utility—Western Service Area PWSID# NJ1518004



Manchester Township Water Utility's goal is to provide you with water that meets or surpasses all the standards for safe drinking water. The Western Service Area (NJ1518004) delivers water to the Whiting section of the Township lying southeast of Manchester Boulevard, northwest of Lake Road and along Station Road.

These health and safety standards are set by the United States Environmental Protection Agency (EPA) and the New Jersey Department of Environmental Protection (NJDEP). We're at work 24 hours a day, 365 days a year to provide you and your family with top quality water. We regularly test water samples to be sure that your water meets the safety standards. All the test results are on file with the NJDEP, the agency that monitors and regulates drinking water quality in our state. Both the EPA and the NJDEP require water suppliers to send a Consumer Confidence Report (CCR) to customers on an annual basis.

This CCR provides important information about your drinking water. It shows how your drinking water measured up to government standards during 2022. Please read it carefully and feel free to call the Manchester Township Water Utility at 732-657-8121 or the EPA Safe Drinking Water Hotline at 800-426-4791 with any questions. If you have specific questions about water as it relates to your personal health, we suggest that you contact your health care provider.

Where does your water come from?

Manchester Township Water Utility-Western, herein after "Western" obtains our water from eight active wells drilled between 90 and 1225 feet into two underground sources of water called the Cohansey and the Potomac-Raritan-Magothy (PRM) Aquifers. The Township controls the property around these wells and restricts any activity that could contaminate them. All of our water is treated at one of five treatment facilities located at or near the wells.

The treatment facilities include treatment for iron removal, corrosion control, and disinfection.

To comply with state and federal regulations, Manchester Township Water Utility - Western issues an annual Consumer Confidence Report describing the quality of the drinking water supplied to our customers.

If you have any questions about the drinking water that Western supplies, please call 732-657-8121. The water quality report for Western can be found at http://www.manchestertwp.com/departments/public-

works-and-utilities/

Waived Requirements

The Safe Drinking Water Act regulations allow monitoring waivers to reduce or eliminate the monitoring requirements for asbestos, volatile organic chemicals, and synthetic organic chemicals. Our system has been granted a waiver for synthetic organic chemicals.

Contact Information

Please contact Manchester Township Water Utility at 732-657-8121 regarding the content of this report. We encourage public participation at our regular meeting which is held every second and fourth Monday of each month at 6:00pm. Meetings are located at the Municipal Building, 1 Colonial Drive, Manchester, NJ.

Call us at 732-657-8121 to find out how to get your water tested for lead. Testing is essential because you cannot see, taste, or smell lead in drinking water.

Lead Notice

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Manchester Water Utility is responsible for providing high quality drinking water but cannot control the variety of materials used in interior plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

Landlords must distribute this information to every tenant as soon as practicable, but no later than three business days after receipt. Delivery must be done by hand, mail, or email, and by posting the information in a prominent location at the entrance of each rental premises, pursuant to section 3 of P.L. 2021, c. 82 (C.58:12A-12.4 et seq.)



How do drinking water sources become polluted?

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791).

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring

minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.

Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

Source Water Assessments

The NJDEP has completed and issued the Source Water Assessment Report and Summary for this public water system, which is available at **http://www.state.nj.us/dep/swap** or by contacting the NJDEP, Bureau of Safe Drinking Water at **609-292- 5550** or <u>watersupply@dep.nj.gov</u>.

The source water assessment table for Western is provided below. The table provides the number of wells that have either a high (H), medium (M), or low (L) susceptibility rating for each of eight contaminant categories. If a water system is rated highly susceptible for a contaminant category, it does not mean a customer is or will be consuming contaminated drinking water. The rating reflects the potential for contamination of source water, not the existence of contamination. Public water systems are required to monitor for regulated contaminants and to install treatment if any contaminants are detected at frequencies and concentrations above allowable levels. As a result of the assessments, the DEP may change existing monitoring schedules based upon susceptibility ratings.

Pathogens: Disease-causing organisms such as bacteria and viruses. Common sources are animal and human fecal wastes.

Nutrients: Compounds, minerals and elements (both naturally occurring and man-made) that aid plant growth. Examples include nitrogen and phosphorus.

Pesticides: Man-made chemicals used to control pests, weeds and fungus. Common sources include land application and manufacturing of pesticides. Examples include herbicides such as atrazine, and insecticides such as chlorodane.

Radionuclides: Radioactive substances that are both naturally occurring and man-made. Examples include radium and uranium.

Inorganics: Mineral-based compounds that are both naturally occurring and man-made. Examples include arsenic, asbestos, copper, lead, and nitrate.

Radon: Colorless, odorless, cancer-causing gas that occurs naturally in the environment. For more information go to http://www.nj.gov/dep/rpp/radon/index.htm or call 800-648-0394.

Disinfection Byproduct Precursors: A common source is naturally occurring organic matter in surface water. Disinfection byproducts are formed when the disinfectants used to kill pathogens (usually chlorine) react with dissolved organic material (leaves, etc.) in surface water.

Volatile Organic Compounds: Man-made chemicals used as solvents, degreasers, and gasoline components. Examples include benzene, methyl tertiary butyl ether (MTBE), and vinyl chloride.

	Pathogens		Nutrients		Pesticides		Volatile- Organic Compounds		Inorganics		Radio- nuclides		Radon		Disinfection Byproduct Precursors									
Sources	Н	М	L	Н	М	L	Н	М	L	Н	М	L	Н	М	L	Н	М	L	Н	М	L	Н	М	L
8 Wells	0	0	8	8	0	0	0	0	8	8	0	0	7	1	0	8	0	0	0	5	3	0	8	0



People with Special Health Concerns

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA / CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

2022 Water Quality Results 2022, 2021 & 2020 Data									
Radioactive Contaminants	MCLG	MCL	Level Detected	Violation	Likely Source				
Combined Radium 228 & 226 Test Results Year 2020	0 pCi/L	5 pCi/L	Range: 1.1 - 3.3 Highest: 3.3	N	Erosion of natural deposits				
Radium-226 Test Results Year 2020	0 pCi/L	5 pCi/L	Range: ND - 1.2 Highest: 1.2	N	Erosion of natural deposits				
Radium-228 Test Results Year 2020	0 pCi/L	5 pCi/L	Range: 1.1 - 2.1 Highest: 2.1	N	Erosion of natural deposits				
Gross Alpha Emitters Test Results Year 2020	0 pCi/L	15 pCi/L	Range: 3.6 – 11.3 Highest: 11.3	N	Erosion of natural deposits				
Inorganic Chemicals	MCLG	MCL	Level Detected	Violation	Likely Source				
Nickel Test Results Year 2020	10 ppm	10 ppm	Range: ND-0.0022 Highest: 0.0022	N	Runoff from fertilizer, leaching from septic tanks, sewage, and erosion of natural deposits				
Nitrate (as Nitrogen) Test Results Year 2022	10 ppm	10 ppm	Range: ND - 1.56 Highest: 1.56	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits				
Fluoride Test Results Year 2020	4 ppm	4 ppm	Range: ND - ND Highest: ND	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories				
Barium Test Results Year 2020	2000 ppb	2000 ppb	Range: 2.38 - 104.6 Highest: 104.6	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits				
Cyanide Test Results Year 2020	200 ppb	200 ppb	Range: ND - 1 Highest: 1	N	Discharge from steel/metal factories; Discharge from plastic and fertilizer factories				
Lead & Cooper	MCLG	AL	Level Detected	Violation	Likely Source				
Lead & Cooper Copper Test Results Year 2021	MCLG 1.3 ppm	AL 1.3 ppm	Level Detected 90th Percentile: 0.0964 Samples > AL: 0	Violation N	Likely Source Corrosion of household plumbing systems and erosion of natural deposits				
Lead & Cooper Copper Test Results Year 2021 Lead Test Results Year 2021	MCLG 1.3 ppm 0 ppb	AL 1.3 ppm 15 ppb	Level Detected 90th Percentile: 0.0964 Samples > AL: 0 90th Percentile: 2.7 Samples > AL: 0	Violation N N	Likely Source Corrosion of household plumbing systems and erosion of natural deposits Corrosion of household plumbing systems and erosion of natural deposits				
Lead & Cooper Copper Test Results Year 2021 Lead Test Results Year 2021 Regulated Disinfectants	MCLG 1.3 ppm 0 ppb MRDLG	AL 1.3 ppm 15 ppb MRDL	Level Detected 90th Percentile: 0.0964 Samples > AL: 0 90th Percentile: 2.7 Samples > AL: 0 Level Detected	Violation N N Violation	Likely Source Corrosion of household plumbing systems and erosion of natural deposits Corrosion of household plumbing systems and erosion of natural deposits Likely Source				
Lead & Cooper Copper Test Results Year 2021 Lead Test Results Year 2021 Regulated Disinfectants Chlorine Test Results Year 2022	MCLG 1.3 ppm 0 ppb MRDLG 4.0 ppm	AL 1.3 ppm 15 ppb MRDL 4.0 ppm	Level Detected 90th Percentile: 0.0964 Samples > AL: 0 90th Percentile: 2.7 Samples > AL: 0 Level Detected Range: 0.22-1.83 Average: 0.83	Violation N N Violation N	Likely Source Corrosion of household plumbing systems and erosion of natural deposits Corrosion of household plumbing systems and erosion of natural deposits Likely Source Water additive used to control microbes				
Lead & Cooper Copper Test Results Year 2021 Lead Test Results Year 2021 Regulated Disinfectants Chlorine Test Results Year 2022 Volatile Organic Compounds /Disinfection By-Products	MCLG 1.3 ppm 0 ppb MRDLG 4.0 ppm MCLG	AL 1.3 ppm 15 ppb MRDL 4.0 ppm MCL	Level Detected 90th Percentile: 0.0964 Samples > AL: 0 90th Percentile: 2.7 Samples > AL: 0 Level Detected Range: 0.22-1.83 Average: 0.83 Level Detected	Violation N N Violation N Violation	Likely Source Corrosion of household plumbing systems and erosion of natural deposits Corrosion of household plumbing systems and erosion of natural deposits Likely Source Water additive used to control microbes Likely Source				
Lead & Cooper Copper Test Results Year 2021 Lead Test Results Year 2021 Regulated Disinfectants Chlorine Test Results Year 2022 Volatile Organic Compounds /Disinfection By-Products HAA5 Haloaecetic Acids Test Results Year 2022	MCLG 1.3 ppm 0 ppb MRDLG 4.0 ppm MCLG n/a	AL 1.3 ppm 15 ppb MRDL 4.0 ppm MCL 60 ppb	Level Detected 90th Percentile: 0.0964 Samples > AL: 0 90th Percentile: 2.7 Samples > AL: 0 Level Detected Range: 0.22-1.83 Average: 0.83 Level Detected Range: ND - 4.00 Highest: 2.27 LRAA	Violation N N Violation N Violation	Likely Source Corrosion of household plumbing systems and erosion of natural deposits Corrosion of household plumbing systems and erosion of natural deposits Likely Source Water additive used to control microbes Likely Source Byproduct of drinking water disinfection				
Lead & Cooper Copper Test Results Year 2021 Lead Test Results Year 2021 Regulated Disinfectants Chlorine Test Results Year 2022 Volatile Organic Compounds /Disinfection By-Products HAA5 Haloaecetic Acids Test Results Year 2022 TTHM Total Trihalomethanes Test Results Year 2022	MCLG 1.3 ppm 0 ppb MRDLG 4.0 ppm MCLG n/a n/a	AL 1.3 ppm 15 ppb MRDL 4.0 ppm MCL 60 ppb 80 ppb	Level Detected 90th Percentile: 0.0964 Samples > AL: 0 90th Percentile: 2.7 Samples > AL: 0 Level Detected Range: 0.22-1.83 Average: 0.83 Level Detected Range: ND - 4.00 Highest: 2.27 LRAA Range: 3.10 – 9.39 Highest: 10.07 LRAA	Violation N N Violation Violation N N	Likely Source Corrosion of household plumbing systems and erosion of natural deposits Corrosion of household plumbing systems and erosion of natural deposits Likely Source Water additive used to control microbes Likely Source Byproduct of drinking water disinfection Byproduct of drinking water disinfection				
Lead & Cooper Copper Test Results Year 2021 Lead Test Results Year 2021 Regulated Disinfectants Chlorine Test Results Year 2022 Volatile Organic Compounds /Disinfection By-Products HAA5 Haloaecetic Acids Test Results Year 2022 TTHM Total Trihalomethanes Test Results Year 2022 Methyl Tertiary-Butyl Ether (MTBE) Test Results Year 2022	MCLG 1.3 ppm 0 ppb MRDLG 4.0 ppm MCLG n/a n/a 70 ppb	AL 1.3 ppm 15 ppb MRDL 4.0 ppm MCL 60 ppb 80 ppb 70 ppb	Level Detected 90th Percentile: 0.0964 Samples > AL: 0 90th Percentile: 2.7 Samples > AL: 0 Level Detected Range: 0.22-1.83 Average: 0.83 Level Detected Range: ND - 4.00 Highest: 2.27 LRAA Range: 3.10 – 9.39 Highest: 10.07 LRAA Range: 0.76-0.76 Highest: 0.76	Violation N N Violation Violation N N N N	Likely SourceCorrosion of household plumbing systems and erosion of natural depositsCorrosion of household plumbing systems and erosion of natural depositsLikely SourceWater additive used to control microbesLikely SourceByproduct of drinking water disinfectionByproduct of drinking water disinfectionLeaking underground fuel tanks				
Lead & Cooper Copper Test Results Year 2021 Lead Test Results Year 2021 Regulated Disinfectants Chlorine Test Results Year 2022 Volatile Organic Compounds /Disinfection By-Products HAA5 Haloaecetic Acids Test Results Year 2022 TTHM Total Trihalomethanes Test Results Year 2022 Methyl Tertiary-Butyl Ether (MTBE) Test Results Year 2022 Chloroform Test Results Year 2022	MCLG 1.3 ppm 0 ppb MRDLG 4.0 ppm MCLG n/a n/a 70 ppb 80 ppb	AL 1.3 ppm 15 ppb MRDL 4.0 ppm MCL 60 ppb 80 ppb 80 ppb	Level Detected 90th Percentile: 0.0964 Samples > AL: 0 90th Percentile: 2.7 Samples > AL: 0 Level Detected Range: 0.22-1.83 Average: 0.83 Level Detected Range: ND - 4.00 Highest: 2.27 LRAA Range: 3.10 – 9.39 Highest: 10.07 LRAA Range: 0.76-0.76 Highest: 0.76 Highest: 1.26	Violation N Violation N Violation N N N N N	Likely SourceCorrosion of household plumbing systems and erosion of natural depositsCorrosion of household plumbing systems and erosion of natural depositsLikely SourceWater additive used to control microbesLikely SourceByproduct of drinking water disinfectionByproduct of drinking water disinfectionLeaking underground fuel tanksByproduct of drinking water disinfection				
Lead & Cooper Copper Test Results Year 2021 Lead Test Results Year 2021 Regulated Disinfectants Chlorine Test Results Year 2022 Volatile Organic Compounds /Disinfection By-Products HAA5 Haloaecetic Acids Test Results Year 2022 TTHM Total Trihalomethanes Test Results Year 2022 Methyl Tertiary-Butyl Ether (MTBE) Test Results Year 2022 Chloroform Test Results Year 2022 Synthetic Organic Compounds (SOC)	MCLG 1.3 ppm 0 ppb MRDLG 4.0 ppm MCLG n/a n/a 70 ppb 80 ppb MCLG	AL 1.3 ppm 15 ppb MRDL 4.0 ppm MCL 60 ppb 80 ppb 80 ppb 80 ppb MCL	Level Detected 90th Percentile: 0.0964 Samples > AL: 0 90th Percentile: 2.7 Samples > AL: 0 Level Detected Range: 0.22-1.83 Average: 0.83 Level Detected Range: ND - 4.00 Highest: 2.27 LRAA Range: 3.10 – 9.39 Highest: 10.07 LRAA Range: 0.76-0.76 Highest: 0.76 Range: 1.26-1.26 Highest: 1.26 Level Detected	Violation N Violation N Violation N N N N Violation	Likely SourceCorrosion of household plumbing systems and erosion of natural depositsCorrosion of household plumbing systems and erosion of natural depositsLikely SourceWater additive used to control microbesLikely SourceByproduct of drinking water disinfectionByproduct of drinking water disinfectionLeaking underground fuel tanksByproduct of drinking water disinfectionLikely Source				
Lead & Cooper Copper Test Results Year 2021 Lead Test Results Year 2021 Regulated Disinfectants Chlorine Test Results Year 2022 Volatile Organic Compounds /Disinfection By-Products HAA5 Haloaecetic Acids Test Results Year 2022 TTHM Total Trihalomethanes Test Results Year 2022 Methyl Tertiary-Butyl Ether (MTBE) Test Results Year 2022 Chloroform Test Results Year 2022 Synthetic Organic Compounds (SOC) Perfluoroctane Sulfonic Acid (PFOS) Test Results Year 2022	MCLG 1.3 ppm 0 ppb MRDLG 4.0 ppm MCLG n/a 70 ppb 80 ppb MCLG n/a	AL 1.3 ppm 15 ppb MRDL 4.0 ppm MCL 60 ppb 80 ppb 70 ppb 80 ppb 13 ppt	Level Detected 90th Percentile: 0.0964 Samples > AL: 0 90th Percentile: 2.7 Samples > AL: 0 Level Detected Range: 0.22-1.83 Average: 0.83 Level Detected Range: ND - 4.00 Highest: 2.27 LRAA Range: 3.10 – 9.39 Highest: 10.07 LRAA Range: 0.76-0.76 Highest: 0.76 Range: 1.26-1.26 Highest: 1.26 Level Detected Range: ND - 4.9 Highest: 4.9	Violation N N Violation Violation N N N N Violation N	Likely Source Corrosion of household plumbing systems and erosion of natural deposits Corrosion of household plumbing systems and erosion of natural deposits Likely Source Water additive used to control microbes Likely Source Byproduct of drinking water disinfection Byproduct of drinking water disinfection Leaking underground fuel tanks Byproduct of drinking water disinfection Likely Source Discharge from industrial chemical factories				



Secondary Contaminants	RUL	Level Found	Violation	Likely Source
Iron Test Results Year 2022-2020	0.3 ppm	Range: ND – 1.35 Highest: 1.35	Υ*	Erosion of natural deposits
Manganese Test Results Year 2022-2020	0.05 ppm	Range: ND - 0.022 Highest: 0.022	Ν	Erosion of natural deposits
Chloride Test Results Year 2022-2020	250 ppm	Range: ND-35.0 Highest: 35.0	Ν	Erosion of natural deposits
Sodium Test Results Year 2022-2020	50 ppm	Range: 3.03 - 17.7 Highest: 17.7	Ν	Naturally present in the environment
pH Test Results Year 2022	6.5-8.5 Units	Range: 6.2-9.0 Highest: 9.0	Y**	Naturally present in the environment
Sulfate Test Results Year 2020	250 ppm	Range: ND-9.85 Highest: 9.85	Ν	Erosion from natural deposits; Industrial wastes
Hardness, Carbonate Test Results Year 2020	250 ppm	Range: 46.4-63.1 Highest: 63.1	Ν	Naturally present in the environment
Total Dissolved Solids (TDS) Test Results Year 2020	500 ppm	Range: 110-146 Highest: 146	Ν	Erosion from natural deposits
Aluminum Test Results Year 2020	0.2 ppm	Range: ND-0.312 Highest: 0.312	Y**	Erosion of natural deposits

* 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.

** Note on Recommended Upper Limit Exceedances: Secondary standards are non-mandatory guidelines to assist public water systems in managing their drinking water for aesthetic considerations, such as taste, color, and odor. These contaminants are not considered to present a risk to human health.

Perfluorooctanoic Acid (PFOA)

Some people who drink water containing PFOA in excess of the MCL over many years could experience problems with their blood serum cholesterol levels, liver, kidney, immune system, or, in males, reproductive system. Drinking water containing PFOA in excess of the MCL over many years may also increase the risk of testicular and kidney cancer. For females, drinking water containing PFOA in excess of the MCL over many years may cause development delays in a fetus and/or an infant.

Perfluorooctanesulfonic Acid (PFOS)

Some people who drink water containing PFOS in excess of the MCL over many years could experience problems with their immune systems, kidneys, liver or endocrine system. For females, drinking water containing PFOS in excess of the MCL over many years may cause development effects and problems with the immune system, liver, or endocrine system in a fetus and/or an infant. Some of these development effects can persist through childhood.

	Defin	itions			
ppm	Parts Per Million: equivalent of one second in 12 days		reduce the level of a contaminant in drinking water.		
ppb	Parts Per Billion: equivalent of one second in 32 years	MCL	Maximum Contaminant Level: The highest level of a		
ppt	Parts Per Trillion: equivalent of one second in 32,000 years		containment that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best		
NA	Not Applicable		available treatment technology.		
RAA	Running Annual Average	MCLG	Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which there is no		
RUL	Recommended Upper Limit		known or expected risk to health. MCLGs allow for a margin		
Primary	Standards: Federal drinking water regulations for substance		of safety.		
that are drinking	health – related. Water suppliers must meet all primary water standards.	MRDL	Maximum Residual Disinfectant Level: The highest level of disinfectant allowed in drinking water. There is convincing		
Seconda substan	ary Standards: Federal drinking water measurements for ces that do not have an impact on health. These reflect		evidence that addition of a disinfectant is necessary for control of microbial contaminants.		
aestheti standaro	c qualities such as taste, odor and appearance. Secondary ds are recommendations, not mandates.	MRDLG	Maximum Residual Disinfectant Level Goal: The level of a drinking water disinfectant below which there is		
AL	Action Level: The concentration of a contaminant which, if exceeded triggers treatment or other requirement which a water system must follow.		no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectant to control microbial contamination.		

TT Treatment Technique: A required process intended to