

Where Does My Water Come From?

IF YOU LIVE IN...	Your water is generally obtained from the following sources...
Avenel	Surface Water & Groundwater-North Tingley Lane/NJ American Water
Carteret	Surface Water & Groundwater-North Tingley Lane/NJ American Water
Colonia	Groundwater-North Tingley Lane/ NJ American Water & South Tingley Lane
Edison (North)	Groundwater-North Tingley Lane/ NJ American Water & South Tingley Lane
Edison (South)	Surface Water & Groundwater-Park Avenue, Maple Avenue, Spring Lake
Fords	Surface Water & Groundwater-North Tingley Lane/NJ American Water & South Tingley Lane
Hopelawn	Surface Water & Groundwater-North Tingley Lane/NJ American Water & South Tingley Lane
Iselin	Surface Water & Groundwater-North Tingley Lane/NJ American Water
Keasbey	Surface Water
Menlo Park	Surface Water & Groundwater-North Tingley Lane/NJ American Water & South Tingley Lane
Metuchen	Surface Water & Groundwater-Park Avenue, Maple Avenue, Spring Lake
Port Reading	Surface Water & Groundwater-North Tingley Lane/NJ American Water
Raritan Center	Surface Water
Sewaren	Surface Water & Groundwater-North Tingley Lane/NJ American Water & South Tingley Lane
South Amboy	Surface Water
South Plainfield	Groundwater-Park Avenue, Maple Avenue, Spring Lake
Woodbridge	Surface Water & Groundwater-North Tingley Lane/NJ American Water & South Tingley Lane

To find water quality for your town, check the source on the data table. Note: During water emergencies, Middlesex Water Company can suspend, increase or decrease supplies from any of its sources.

Our Distribution System

The Middlesex distribution system, with about 732 miles of main, is prepared to provide for daily and maximum water requirements to meet customer demand. Our five storage facilities are used to supply customers at times of peak demand, outages and emergencies. The Company provides reliable fire protection with over 4,700 fire hydrants that it owns and maintains. The Company continued its efforts to upgrade its water distribution system through its RENEW cleaning and lining program. RENEW extends the life of older pipe and helps to improve overall water quality and service while strengthening the water distribution infrastructure. Middlesex invested \$3.4 million upgrading 27,000 linear feet of water main in Woodbridge Township in 2006. The Company expects to invest \$3.9 million upgrading an estimated 50,000 linear feet of water main in 2007.

In 2006, we partnered with a local fire district in a hydrant identification program utilizing global positioning equipment. Working with local firefighters, we were able to provide the fire district computerized access to detailed information about fire hydrant locations in its service area. This project not only saves firefighters critical time by allowing quicker hookup to the closest available hydrants with the best possible water pressures, it also has the potential to save lives while also limiting property loss.

Middlesex Water Company, through a subsidiary, offers a water line maintenance program for residential customers which covers repairs for a leaking or broken water service line. In March 2007, the Company unveiled a similar program to cover repairs on clogged or broken sewer lines. Customers can enjoy peace of mind from costly repairs by registering for the LineCare™ Water Maintenance Plan, the LineCare Sewer Maintenance Plan or both plans under LineCare Plus.

The Company continues to be ever mindful of emergency preparedness and facility safety issues. Recognizing the importance of public safety, Middlesex Water regularly meets with area fire representatives to exchange ideas and discuss common goals such as fire protection, water quality and emergency preparedness.

Source Water Assessment

The New Jersey Department of Environmental Protection (NJDEP) has completed and issued the Source Water Assessment Report and Summary for Middlesex Water Company, which is available at [www.state.nj.us/dep/swap](http://www.state.nj.us/dep/swap) or by contacting the NJDEP, Bureau of Safe Drinking Water at (609) 292-5550. A summary of this report is found below.

The goal of the assessment was to measure each system's susceptibility to influences by potential sources of contamination. The NJDEP evaluated the susceptibility of the source water to various categories of contaminants defined below.

- Pathogens** - Organisms such as bacteria and viruses.
  - Nutrients** - Compounds such as phosphorus and nitrogen that aid in the growth of organisms.
  - Volatile Organic Compounds (VOCs)** - Man-made chemicals used as solvents, degreasers and gasoline components such as MTBE.
  - Pesticides** - Man-made chemicals used to control pests and weeds such as Atrazine.
  - Inorganics** - Mineral-based, man-made and naturally occurring, compounds such as arsenic and nitrates.
  - Radionuclides** - Radioactive, man-made and naturally occurring, substances such as radium and uranium.
  - Radon** - Naturally occurring gas.
  - Disinfection Byproduct Precursors** - Naturally occurring organic matter, mainly in surface waters, that when combined with disinfectants, such as chlorine, produce unwanted byproducts.
- A public water system's susceptibility rating (Low, Medium or High) is a combination of two factors:
- How sensitive the water supply is to potential contamination.
  - How often a contaminant is used or exists near the source water.
- The ratings are based on the potential for a contaminant to be at or above 50% of the MCL (High), between 10% and 50% of the MCL (Medium) and less than 10% of the MCL (Low).

DEP considered all surface water highly susceptible to pathogens, therefore, all intakes received a high rating for the pathogen category. For the purpose of the Source Water Assessment Program, radionuclides are more of a concern for groundwater than surface water. As a result, surface water intakes' susceptibility to radionuclides was not determined and they all received a low rating.

If a 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 customize (change existing) monitoring schedules based on the susceptibility ratings.

Susceptibility Ratings for the Middlesex Water Company System

The table below illustrates the susceptibility ratings for each contaminant category for each source in the system. For susceptibility ratings of purchased water, refer to the specific water system's source water assessment report.

Parameter	31 Wells	1 Surface Water Intake
Pathogens	Medium - 29 Low - 2	High
Nutrients	High - 10 Medium - 21	High
Pesticides	Medium - 4 Low - 27	Medium
VOCs	High - 31	Medium
Inorganics	High - 14 Medium - 17	High
Radionuclides	High - 3 Medium - 28	Low
Radon	High - 31	Low
Disinfection Byproduct Precursors	High - 14 Medium - 17	High

For more information about our water sources, please contact Middlesex Water Company at **(732) 634-1500, Ext. 610**. We can all play a role in protecting our water sources by disposing of waste such as motor oil, paint and household cleaners, and limiting the use of fertilizer, pesticides and herbicides. Contact your local Public Works Department for proper household hazardous waste disposal.



# 2006

## Water Quality Report



**MIDDLESEX**  
WATER COMPANY

This report contains important information about your drinking water. If you do not understand it, please have someone translate it for you.

這份報告是有關您飲水的重要資料。請找人翻譯，或請懂的人解釋給您聽。

المعلومات في هذا التقرير تحتوي على معلومات مهمة عن مياه الشرب التي تشربونها. من فضلك اذا لم تفهم هذا التقرير، من فضلك من يترجمها لك.

આ રિપોર્ટમાં ગરમ પીવાના પાણીના સંબંધમાં મહત્વના માહિતીઓનો સમાવેશ થાય છે. જો તમને આ રિપોર્ટ સમજાતો નથી તો કૃપા કરીને કોઈને આ રિપોર્ટ સમજાવવાનું કહો.

Este informe contiene información muy importante sobre su agua beber. Tradúzcalo ó hable con alguien que lo entienda bien.

Landlords, businesses, schools, hospitals and other groups are encouraged to share this Water Quality Report with all water consumers at their locations.



**MIDDLESEX**  
WATER COMPANY

1500 Ronson Road  
Iselin, New Jersey 08830  
(732) 634-1500


**PWSID# 1225001**

*Online bill payment is now available.  
Visit [www.middlesexwater.com](http://www.middlesexwater.com) for details*

Water...When You Need It!

The Middlesex system produced 16.9 billion gallons of water in 2006. We utilize both surface and groundwater supplies during various times of the year and customers may receive either or a blend of both sources depending upon location and demands. Middlesex Water Company's water supplies are not fluoridated.

Surface water is obtained from the Delaware and Raritan Canal (D&R Canal), which is owned by the State of New Jersey and operated by the New Jersey Water Supply Authority. These supplies are supplemented by supplies from the Round Valley and Spruce Run Reservoir System. Surface water sources provide 71 percent of the water distributed by the system. The remainder (23 percent) comes from our wells and purchased water.



The Company obtains groundwater from its Park Avenue and Spring Lake Wellfields in South Plainfield and from its Tingley Lane Wellfields in North and South Edison. The Middlesex System has 31 wells, which, in 2006, produced over 3.8 billion gallons of water. Groundwater comes from an underground source of water known as the Brunswick Aquifer.

Water quality is monitored at the Plant, at each wellfield, and throughout the distribution system to determine that water delivered to our consumers meets federal and state drinking water quality standards.

Public Outreach


Middlesex Water encourages customers to learn more about their water supply. We regularly provide information via bill inserts, construction notices, customer updates, advertisements, door hangers, special mailings and our website. We also sponsor water awareness contests for school children, provide speakers for organizations, and visit area schools to educate people about the importance of safe drinking water, wise water use and careers in the water industry.

In 2006, the Company sponsored a poster contest for young students which drew hundreds of entries from area schools. The contest encouraged students in grades 2-5, to design a poster on the theme, "Water's Amazing Journey". Six winners were selected and each was presented with a U.S. Savings Bond and honored, along with their parents and teachers, at a Company luncheon in observance of Safe Drinking Water Week in May.

- Winners pictured (l. to r.) with President Dennis W. Doll are:**
- Agnes Tai, Grade 5,** Chittick Elementary School, East Brunswick
  - Kristen Gallo, Grade 3,** St. John Vianney School, Colonia
  - Baminh Ngoc, Grade 4,** Nathan Hale School, Carteret
  - Fabrizio Villarreal, Grade 2,** Dr. Herbert N. Richardson – 21st Century School, Perth Amboy
  - Corrine Winters, Grade 4,** Bowne-Munro School, East Brunswick
  - Leslie Rodriguez, Grade 5,** Shull School, Perth Amboy, (Not Pictured)



Clean, renewable solar energy is proving to offer both economic and environmental benefits for Middlesex Water. In early 2006, the Company completed and put into operations a 500kw Solar Energy system at its CJO Water Treatment Plant. The system, which was partially funded through a grant from the New Jersey Clean Energy Program, is expected to produce approximately 3 to 3.5% of the annual energy needs of the treatment plant.



Safeguarding Our Water

Middlesex Water Company treats and filters surface water at its Edison plant to ensure its safety and potability. Groundwater from our wells passes through layers of soil and gravel which act as a natural filter. Our wells in South Plainfield utilize air-stripping technology to ensure the complete removal of certain volatile organic compounds (VOCs).

At Middlesex Water, our staff, working in our state-certified laboratory, conducts more than 60,000 water quality tests each year to assure that the required level of drinking water quality is maintained. Water is tested for numerous constituents including bacteria, pH, color, alkalinity, VOCs, and chlorine residuals. Samples of treated and untreated water are taken regularly to assure quality that complies with state and federal standards for quality and safety.



## Only Tap Water Delivers

- Public Health Protection
- Fire Protection
- The Infrastructure that Supports a Solid Economy
- Quality of Life

Partnership for Safe Water

Middlesex Water continues to participate in the Partnership for Safe Drinking Water, an association of water utilities and government, which challenges utilities to seek continuous improvement in their facilities and operations through self assessment and peer review.

Ensuring Water Quality

To ensure that tap water is safe to drink, the EPA and the DEP Bureau of Safe Drinking Water prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. The U.S. 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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA Safe Drinking Water Hotline at (800) 426-4791.

Help Preserve Our Water Resources

Middlesex Water encourages customers to use water wisely year-round. The Company has an ample water supply to enable it to consistently meet its customers' demands for water. The following tips will not only help preserve our water supplies, but may also help to lower your water bill:

- Fix leaks immediately.
- In hot weather, water grass early in the morning.
- Select the appropriate water level when doing laundry.
- Check sprinkler heads periodically to ensure they are aimed correctly.
- Get a cover for your swimming pool so that water does not evaporate.
- Soak dishes before washing.
- Run the dishwasher only when full.



**What the Numbers Mean to You:** The table shows the results of our monitoring during 2006. The EPA requires monitoring of over 100 drinking water contaminants. Those listed are the only contaminants detected. For a complete list of monitored contaminants, contact Middlesex Water Company at (732) 634-1500. As you can see, the Middlesex Water system had no MCL violations. The EPA has determined that your water is safe at these levels. The State requires water systems to monitor for certain contaminants less than once a year because the concentration of these contaminants is not expected to vary significantly from year to year. Therefore, some of these data may represent prior period testing that is considered representative of water quality.

Definitions & Abbreviations used below:

**Primary Standards:** Standards which relate to public health. **MCLG:** Maximum Contaminant Level Goal. The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety. **MCL:** Maximum Contaminant Level. The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology. **MRDL:** Maximum Residual Disinfectant Level. The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial

contaminants. **MRDLG:** Maximum Residual Disinfectant Level Goal. The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination. **Waiver:** State permission to reduce monitoring frequency because previous results have consistently been below the MCL. **PBB:** Parts Per Billion. 1 part per billion corresponds to 1 minute in 2000 years or 1 penny in \$10 million. **PPM:** Parts Per Million. 1 part per million corresponds to 1 minute in 2 years or 1 penny in \$10 thousand. **mrem/year:** Millirems per year. A measure of radiation absorbed by the body. **N/A:** Not Applicable. **ND:** None Detectable at testing limit. **NR:** Not Reported.

**<:** Less Than. **AL:** Action Level. The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow. **CNR:** Currently Not Regulated. **NTU:** Nephelometric Turbidity Unit. Used to measure cloudiness in drinking water. We monitor turbidity because it is a good indicator that our filtration system is functioning properly. High turbidity can hinder the effectiveness of disinfectants. **pCi/l:** Picocuries per Liter. A measure of the radioactivity in water.

- Note 1:** Middlesex Water Company is on reduced monitoring, once per three-year cycle. The listed Arsenic concentrations are from 2005.
- Note 2:** Middlesex Water Company is on reduced monitoring, once per three-year cycle. The listed Lead and Copper concentrations are the 90th Percentile Value from 2004. The highest level detected was 17 ppb for Lead and 0.347 ppm for Copper.
- Note 3:** MCLs for these chemicals were set by the NJDEP below those set by the EPA.
- Note 4:** Compliance is based on running annual average of quarterly sampling.
- Note 5:** TT (Treatment Technique) - A required process intended to reduce the level of a contaminant in drinking water. The TT does not apply to groundwater. Turbidity MCL - The Turbidity Level must be less than or equal to 0.3 ntu's in 95% of the samples taken every month and at no time exceed 1 ntu.
- Note 6:** New Radiological Rule will be in effect in 2008. North Tingley Lane/NJ American Water data is from 2005. The data for all other sites is from 2003.
- Note 7:** EPA considers 50 pCi/l to be the level of concern for Beta Particles.
- Note 8:** The Gross Alpha compliance is determined minus the Radon and Uranium contribution.
- Note 9:** Uranium value is determined by substitution unless testing is performed, only if Gross Alpha (minus Radon) is >15 pCi/l.
- Note 10:** MRDL and MRDLG are Maximum Disinfectant (Chlorine Residual) levels.
- Note 11:** Only North Tingley Lane/NJ American Water was sampled in 2006. Spring Lake and Maple Avenue were not used in 2006, all others were previously ND.

What Substances May Be Found in Drinking Water Sources?

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water moves over land or through the ground, it dissolves naturally occurring minerals and organics and can pick up substances resulting from the presence of animal or human activity. Substances that may be present in source waters prior to the treatment process include:

- Microbial Contaminants:** Such as viruses and bacteria, which may come from sewage treatment plants, septic systems, livestock and wildlife.
- Inorganic Contaminants:** Such as salts and metals, which can be naturally occurring or result from storm water runoff, wastewater discharges, or farming.
- Pesticides and Herbicides:** Which may come from a variety of sources such as agriculture, storm water runoff, and residential uses.
- Organic Chemical Contaminants:** Including natural, synthetic and volatile organic chemicals, which are by-products of nature and industrial processes and petroleum production and can also come from gas stations, storm water runoff and septic systems.
- Radioactive Contaminants:** Which can be naturally occurring or may be the result of oil and gas production and mining activities.

ANNUAL WATER QUALITY RESULTS - 2006														
Parameter	Units	MCL (State/Federal Standard)	MCLG (Ideal Goal)	Surface Water		Groundwater North Tingley Lane/ NJ American Water		Groundwater South Tingley Lane		Groundwater Park Ave./Maple Ave./ Spring Lake		Major Sources in Drinking Water		MCL Violation Yes/No
Inorganic	Arsenic (Note 1 & 3)	ppb	5	N/A		ND	1.1	4.1	1.7	Erosion of natural deposits			No	
	Lead (Note 2)	ppb	AL=15	0		6.0	6.0	6.0	6.0	Corrosion of household plumbing			No	
	Copper (Note 2)	ppm	AL=1.3	1.3		0.259	0.259	0.259	0.259	Corrosion of household plumbing			No	
	Nitrate	ppm	10	10		1.1	1.4	1.6	4.0	Erosion of natural deposits			No	
Volatile Organic Chemicals														
Trichloroethylene (Notes 3 & 4)	ppb	1	0		ND	0.6 - 0.7	0.6 - 0.8	ND	Discharge from metal degreasing sites			No		
Turbidity	NTU's	TT (Note 5)	N/A	100%	0.03 - 0.13	0.04 - 0.56	N/A	N/A	Soil runoff			N/A		
Microbiological														
Total Coliform Bacteria	MCL: Found in > 5% of samples		0	0.5%		0.5%	0.5%	0.5%	Naturally present in the environment			No		
Fecal Coliform	N/A		0	ND		ND	ND	ND	Human and animal fecal waste			No		
Radiological (Note 6)														
Radium 226 & 228	pCi/l	5	0	ND		ND	ND	ND	ND - 0.36	Erosion of natural deposits			No	
Beta & Photon emitters (Note 7)	pCi/l	50	0	3.7 - 12		4.9 - 8	8.8 - 15	2.9 - 6.3	Decay of natural and man-made deposits			No		
Parameter	Units	MCL (State/Federal Standard)	MCLG (Ideal Goal)	Highest Level Used for Compliance		Highest Level Used for Compliance		Highest Level Used for Compliance		Highest Level Used for Compliance		Major Sources in Drinking Water		MCL Violation Yes/No
Gross Alpha emitters (Note 8)	pCi/l	15	0	ND		5.7	4.5 - 6.9	3.3	2 - 4	6.3	4.1 - 8.8	Erosion of natural deposits		No
Uranium (Note 9)	ppb	30	0	2.0	2.0	8.5	7 - 10	20.0	19.0 - 21.0	9.4	6 - 13	Erosion of natural deposits		No
Parameter	Units	MCL (State/Federal Standard)	MCLG (Ideal Goal)	Highest Level Used for Compliance		Highest Level Used for Compliance		Highest Level Used for Compliance		Highest Level Used for Compliance		Major Sources in Drinking Water		MCL Violation Yes/No
Disinfection By-Products														
Total Trihalomethanes (Note 4)	ppb	80	N/A	54.0	22.5 - 91.7	54.0	3.0 - 6.3	54.0	3.3 - 7.1	54.0	2.1 - 8.6	By-product of drinking water chlorination	No	
Chloroform	ppb	N/A	N/A		14.5 - 78.0		ND		ND		ND	By-product of drinking water chlorination	No	
Bromodichloromethane	ppb	N/A	0		6.1 - 13.2		ND - 0.8		ND - 0.9		ND - 1.1	By-product of drinking water chlorination	No	
Dibromochloromethane	ppb	N/A	60		0.7 - 2.8		1.2 - 2.3		1.2 - 2.6		1.2 - 2.3	By-product of drinking water chlorination	No	
Bromoform	ppb	N/A	0		ND - 0.8		1.7 - 3.2		2.1 - 3.6		0.7 - 3.2	By-product of drinking water chlorination	No	
Total Haloacetic Acids (Note 4)														
Monochloroacetic Acid	ppb	N/A	N/A	40.0	14.0 - 64.2	40.0	ND - 11.7	40.0	ND - 1.3	40.0	ND - 1.7	By-product of drinking water chlorination	No	
Dichloroacetic Acid	ppb	N/A	0		ND - 2.24		ND		ND		ND	By-product of drinking water chlorination	No	
Trichloroacetic Acid	ppb	N/A	0		5.7 - 27.3		ND - 4.5		ND		ND - 1.4	By-product of drinking water chlorination	No	
Bromoacetic Acid	ppb	N/A	300		7.3 - 34.5		ND - 6.1		ND		ND	By-product of drinking water chlorination	No	
Bromoacetic Acid	ppb	N/A	N/A		ND - 1.2		ND		ND		ND	By-product of drinking water chlorination	No	
Dibromoacetic Acid	ppb	N/A	N/A		ND - 1.0		ND - 1.2		ND - 1.3		ND - 1.7	By-product of drinking water chlorination	No	
Disinfectant Residuals (Note 10)	ppm	4 ppm MRDL	4 ppm MRDLG	0.75	ND - 1.6	0.75	ND - 0.9	0.75	ND - 1.1	0.75	0.1 - 1.9	Result of water disinfection		No
Additional Monitoring														
Additional contaminants for which we monitor that are currently not regulated by the EPA														
Perchlorate (Note 11)	ppb	CNR	N/A	-		3.3	2.4 - 4.9	-		-		Oxygen additive in solid fuel propellant for rockets	N/A	

HEALTH INFORMATION — Health Effects of Detected Contaminants (Required Language)

**Arsenic** - Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.

**Lead** - Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

**Copper** - Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

**Nitrate** - Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.

**Trichloroethylene** - Some people who drink water containing trichloroethylene in excess of the MCL over many years could experience problems with their liver and may have an increased risk of getting cancer.

**Turbidity** - Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses and parasites, which can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

**Total Coliform Bacteria** - Coliforms are bacteria which are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present.

**Radium 226 & 228** - Some people who drink water containing radium 226 or 228 in excess of the MCL over many years have an increased risk of getting cancer.

**Beta & Photon emitters** - Certain minerals are radioactive and may emit forms of radiation known as photons and beta radiation. Some people who drink water containing beta and photon emitters in excess of the MCL over many years may have an increased risk of getting cancer.

**Gross Alpha emitters** - 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.

**Uranium** - Some people who drink water containing uranium in excess of the MCL over many years may have an increased risk of getting cancer and kidney toxicity.

**Total Trihalomethanes** - Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys or central nervous systems and may have an increased risk of getting cancer.

Monitoring Waivers

The Safe Drinking Water Act regulations allow monitoring waivers to reduce or eliminate the monitoring requirements for some compounds because previous results have consistently been below the MCL. Middlesex Water Company received waivers for the following contaminants in both its surface and groundwater supplies: Synthetic Organic Chemicals and Nitrites.

A Word of Caution

Our treatment systems are designed and operated to produce water that meets all state and federal standards. Many substances and microscopic organisms found in water may be a concern if they occur at high concentrations. For some contaminants, MCL levels have not been set because the EPA has not determined at what level they pose a public health risk. This is often because a reliable detection method is unavailable and/or because the contaminant is rarely found in treated water.

Some naturally occurring organisms commonly found in the natural water supplies may not be eliminated during the treatment process. This means that even a well-run system may contain low levels of microscopic organisms. The levels, however, are normally of little concern to healthy individuals. It should be noted, however, that under certain circumstances, these organisms might amplify to dangerous levels within a customer's own water supply system.

All customers, including residential, commercial and industrial customers, and other large facilities such as schools, hospitals and hotels/motels, should follow appropriate procedures for maintaining their own internal plumbing systems and appliances. If you have any concerns about these matters, please call the EPA Safe Drinking Water Hotline at (800) 426-4791.

Required Additional Health Information

**Lead** - Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home plumbing. If you are concerned about elevated lead levels in your home water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the EPA Safe Drinking Water Hotline at (800) 426-4791.

**Nitrate** - Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider.

Special Considerations Regarding Children, Pregnant Women, Nursing Mothers, and Others

Children may receive a slightly higher amount of a contaminant present in the water than do adults, on a body weight basis, because they may drink a greater amount of water per pound of body weight than do adults. For this reason, reproductive or developmental effects are used for calculating a drinking water standard if these effects occur at lower levels than other health effects of concern. If there is insufficient toxicity information for a chemical (for example, lack of data on reproductive or developmental effects), an extra uncertainty factor may be incorporated into the calculation of the drinking water standard, this making the standard more stringent, to account for additional uncertainties regarding these effects. In the cases of lead and nitrate, effects on infants and children are the health endpoints upon which the standards are based.

