## Where Does My Water Come From?

Avenel Carteret

**East Brunswick** Edison (North)

**Edison (South)** 

Fords

**Highland Park** 

Keasbey Menlo Park

Old Bridge Port Reading

**Raritan Center** Sayreville Sewaren

Woodbridge

IF YOU LIVE IN... Your water is generally obtained from the following sources..

Surface Water & Groundwater-North Tingley Lane/NJ American Water Surface Water & Groundwater-North Tingley Lane/NJ American Water Groundwater-North Tingley Lane/ NJ American Water & South Tingley Lane Surface Water

Groundwater-North Tingley Lane/ NJ American Water & South Tingley Lane Surface Water & Groundwater-Park Avenue, Maple Avenue, Spring Lake Surface Water & Groundwater-North Tingley

Lane/NJ American Water & South Tingley Lane Surface Water Surface Water & Groundwater-North Tinglev

Lane/NJ American Water & South Tingley Lane Surface Water & Groundwater-North Tingley Lane/NJ American Water Surface Water

Surface Water Surface Water & Groundwater-North Tingley Lane/NJ American Water & South Tingley Lane Surface Water & Groundwater-Park Avenue, Maple Avenue, Spring Lake

Surface Water & Groundwater-North Tingley Lane/NJ American Water Surface Water Surface Water

Surface Water & Groundwater-North Tingley Lane/NJ American Water & South Tingley Lane Surface Water

Surface Water & Groundwater-North Tinglev 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.

Surface Water

## **Our Distribution System**

The Middlesex distribution system, with over 730 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 more than 4,400 fire hydrants that it owns and maintains. In 2004, the Company continued its RENEW Program and invested \$3.8 million to clean and line eight miles of unlined water mains in Woodbridge Township and in Edison Township. RENEW extends the life of older pipe and helps to improve overall water quality and service while strengthening the water distribution infrastructure. Middlesex Water routinely flushes its distribution lines to help ensure quality and

In response to the events of September 11, and to the State's Domestic Security Preparedness Act, Middlesex Water has completed a vulnerability assessment of its facilities and, in 2004, updated its emergency response plan and strategy. In October 2004, the Company successfully participated in a NJ State Police emergency tabletop exercise to test the efficiency of its strategic

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.

## Did You Know?

We deliver 30 gallons of water to customers' homes for less than a dime?



PWSID #1225001

## This report contains important information about your drinking water. If you do not understand it,

**运份報告是有関您飲水的重要资料。** 猜找人 謝澤: 或精泽的人解釋給您聽。

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elan mer die Arten field General die Minstell 🙆 . करको चानुकार हुने। व्हाका मेले अकारहा पहली इस्म इस्म कार्य कार रहा

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 Ouality Report with all water consumers at their locations



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

PWSID# 1225001

## **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 or by contacting the NJDEP, Bureau of Safe Drinking Water at (609) 292-5550. A summary of this report is found below.

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

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.

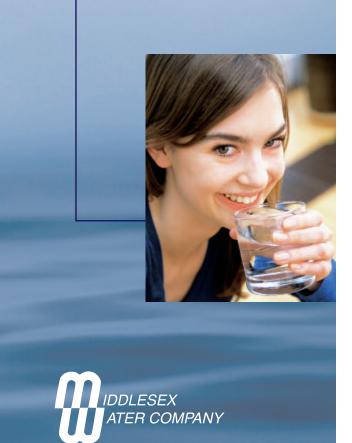
## Susceptibility Ratings for the Middlesex **Water Company System**

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	High
	Low - 2	
Nutrients	High - 10	High
	Medium - 21	
Pesticides	Medium - 4	Medium
	Low - 27	
VOCs	High - 31	Medium
Inorganics	High - 14	High
	Medium - 17	
Radionuclides	High - 3	Low
	Medium - 28	
Radon	High - 31	Low
Disinfection	High - 14	High
Byproduct Precursors	Medium - 17	

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.

## **Water Quality Report** 2004



# please have someone translate it for you.



www.middlesexwater.com

## We'd Like to Hear From You:

Middlesex Water Company would like to continue providing you with helpful information about your water service.

We invite you to take a brief survey (10 questions) about this water quality report online at our website. The first 100 respondents will receive a free gift, compliments of Middlesex Water. To participate, log on to www.middlesexwater.com

## **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 and 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 2004, the Company sponsored a contest for young students which drew more than 1,000 entries. The contest encouraged students in grades 2-5, to design a bumper sticker on the theme, "Water is Wonderful." Eight 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.



Woodbridge Mayor Frank Pelzman (left) and Dennis G. Sullivan, President (right), congratulate winners of the Company's "Water is Wonderful" Bumper Sticker Contest. Winners are listed with their home towns. Pictured (from left to right) Rucha Phadtare, Highland Park; Gabrielle Carroll, Old Bridge; Arvelo, Perth Amboy; Emily Ryan, Colonia; Kevin G Woodbridge; Max Fasano, Woodbridge; and Brian Connolly, East Brunswick.

## **Your Drinking Water Meets or is Better Than** State and Federal Primary Standards for **Drinking Water Quality**

This document is an annual report on the quality of water delivered by Middlesex Water Company in 2004. It meets the Federal Safe Drinking Water Act for "Consumer Confidence Reports" and contains information on the sources of our water, its constituents, and the health risks associated with any contaminants.

Middlesex Water is pleased to tell you we had no Safe Drinking Water Act violations in 2004. We believe high quality drinking water is vital to the well-being of our communities and are committed to delivering a safe and plentiful drinking water supply. We encourage you to read this report to gain a better understanding of all that's involved in bringing clean, clear tap water to your home.

## **How to Contact Us**

www.middlesexwater.com

If you have questions about this report, would like more information about your water quality and/or opportunities for public participation in decisions about our drinking water, please call Frank Falco, Director of Production, at (732) 634-1500, Ext. 610. You may also write the Company at: Middlesex Water Company, 1500 Ronson Road, Iselin, NJ 08830. More information is available at our website at

You may obtain additional information about drinking water regulatory programs by contacting the Environmental Protection Agency (EPA) Safe Drinking Water Hotline at (800) 426-4791.

## Water...When You Need It!

The Middlesex system produced 16.6 billion gallons of water in 2004. 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 70 percent of the water distributed by the system.

The remainder comes from our wells (23 percent) and purchased water (7 percent).

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 2004, 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.

In the Summer of 2004, Middlesex Water began construction of a new 60" diameter raw water supply pipeline from its pump station in New Brunswick, NJ under the Raritan River to its water treatment plant in Edison, NJ. The pipeline was installed to ensure backup water supply in emergencies and to provide security and necessary redundancy for the existing supply line. This pipeline will allow untreated water, obtained from the D&R Canal, to be transported to the Company's plant where it can be treated and distributed to a population of more than 232,000 residents in Middlesex County. The \$9.0 million project, expected to be completed by the Spring of 2005, is being financed through low interest loans obtained through the New Jersey Environmental Infrastructure Trust.

The Company is moving forward with the design and feasibility of the installation of a 500 kilowatt Solar Energy system at its Carl J. Olsen Water Treatment Plant. This project would be partially funded by the Office of Clean Energy of the State of New Jersey Board of Public Utilities (BPU) and would reduce annual electrical demands at the Plant by 4%.

## 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.

## **Partnership for Safe Water**

In 2004, Middlesex Water received an award from the EPA for its five-year participation in the Partnership for Safe Drinking Water. The Partnership, an association of water utilities and government, 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:

- 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.

# The goal of the assessment was to measure each system's

What the Numbers Mean to You: The table shows the results of our monitoring during 2004. 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 FPA 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. PPB: 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:	Barium Testing was performed in 2002.	The next
	sampling period is 2005	

Percentile Value. 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 DEP below those set by the EPA.

Note 2: The listed Lead and Copper concentrations are the 90th

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: The levels listed are from 2003. A new Radiological Rule went into effect in 2004 with the initial sampling period to begin in 2005.

Note 7: EPA considers 50 pCi/l to be the level of concern for Beta Particles

Note 8: Uranium testing is performed when Gross Alpha is >15

Note 9: Trihalomethane values used for compliance are the running annual averages of samples taken.

Note 10: The regulations for Haloacetic Acids went into effect December 16, 2001

Note 11: Maximum Residual Disinfectant Levels (MRDL) and Maximum Residual Disinfectant Level Goals (MRDLG) are Maximum Disinfectant (Chlorine Residual) levels.

Note 12: The level listed for Groundwater North Tingley Lane/NJ American Water is 2004 data. All others are 2003 data.

Note 13: Maple Avenue and Spring Lake Wells were not utilized in 2004. The level is from Park Avenue only.

### **ANNUAL WATER QUALITY RESULTS - 2004** MCL Compliance MCLG (State/Federal North Tingley Lane/ Groundwater Park Ave./Maple Achieved **Major Sources in Drinking Water** Units (Ideal Goal) Surface Water **South Tingley Lane Parameter** Ave./Spring Lake Yes/No norganic Barium (Note 1) <0.2 - 0.23 Discharge from metal refineries ND ND (Note 2) ppb AL=15 6.0 Corrosion of household plumbing 6.0 6.0 Yes Corrosion of household plumbing AL=1.3 1.3 0.259 0.259 0.259 Copper (Note 2) 0.259 Nitrate 10 10 3.5 Erosion of natural deposits Yes Volatile Organic Chemicals Trichloroethylene (Notes 3 & 4) NDDischarge from metal degreasing sites ND - 0.50 ND N/A 100% 0.02 - 0.32 N/A TT (Note 5) Soil runoff Microbiological 0 Total Coliform Bacteria MCL: Found in > 5% of sample 0.05% ND ND NDNaturally present in the environment Yes Radiological (Note 6) ND - 0.36 ND - 0.09 Radium 226 & 228 0.13 .08 - .14 Erosion of natural deposits Yes pCi/I 2.9 - 6.3 Beta & Photon emitters (Note 7) 50 3.7 - 12 6.5 - 6.6 Decay of natural and man-made deposits Yes 8.8 - 15 4.1 - 8.8 Gross Alpha emitters 15 7.2 - 8.1 3.0 - 4.0 Erosion of natural deposits Yes (Note 8) 30 0 Yes ppb 19.4 - 20.9 Erosion of natural deposits ighest Level Compliance Used for Range MCLG Achieved Units (State/Federal Used for Range Used for Range Used for Range Major Sources in Drinking Water Standard) (Ideal Goal) Compliance Compliance **Disinfection By-Products** 39.6 0.7 - 68.2 6.0 1.7 - 11.6 6.0 1.7 - 11.6 Total Trihalomethanes (Note 9) N/A dqq By-product of drinking water chlorination N/A 4.6 - 49.8 Chloroform N/A ppb By-product of drinking water chlorination Yes ND - 1.2 ND - 1.2 ND - 1.2 Bromodichloromethane N/A 3.8 - 13.8 By-product of drinking water chlorination Dibromochloromethane N/A 60 0.87 - 3.70.57 - 3.50.57 - 3.50.57 - 3.5By-product of drinking water chlorination 1.1 - 6.9 1.1 - 6.9 1.1 - 6.9 ppb N/A 0 ND - 1.2 By-product of drinking water chlorination Yes ND - 2.5 24.5 8.6 - 44.7 3.2 ND - 2.5 3.2 ND - 2.5 3.2 Yes Total Haloacetic Acids (Note 10) ppb 60 By-product of drinking water chlorination Monochloracetic Acid ND - 2.3 ND ND By-product of drinking water chlorination Yes N/A 2.8 - 20.0 3.7 - 25.4 ND Yes ND ND By-product of drinking water chlorination Dichloroacetic Acid N/A ND Yes By-product of drinking water chlorination ND ND Trichloroacetic Acid daa N/A 300 ND - 1.0 ND - 1.0 ND - 1.0 By-product of drinking water chlorination Yes ND - 1.6 N/A Bromoacetic Acid ppb N/A Yes ND - 2.4 By-product of drinking water chlorination Dibromoacetic Acid ND - 2.4 ND - 2.4 ppb N/A 0.56 < 0.05 - 1.83 0.56 < 0.05 - 1.83 0.56 <0.05 - 1.83 Yes Disinfectant Residuals (Note 11) 4 ppm MRDL 4 ppm MRDLG 0.56 < 0.05 - 1.83 Result of water disinfection Additional Monitoring Additional contaminants for which we monitor that are currently not regulated by the EPA 2.2 ND ND (Note 13) Oxygen additive in solid fuel propellant for rockets N/A Perchlorate (Note 12) ND

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

**Barium -** Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure. **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

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/2002-2004 and Nitrites/1997.

## 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.

## **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, 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.



## 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. method is unavailable and/or because the

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.

## For Your Safety – A Message for People with Compromised Immune Systems

Although our drinking water meets all state and federal regulations, some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised individuals 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 individuals should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial pathogens are available from the EPA Safe Drinking Water Hotline at (800) 426-4791.

## **General Safety Suggestions Regarding Water Main Breaks**

During main breaks or other system disruptions, Middlesex Water Company routinely encourages customers to boil their water, used for drinking, for one minute prior to use. This suggestion is offered to provide an extra margin of safety to our customers and may be of particular interest to people with compromised immune systems, the elderly and infants who may be more vulnerable to possible contaminants in drinking water than the general population. The Company suggests that these individuals discuss the boil water safety recommendation with their health care providers, should they experience any water service disruption to their homes in the future. This precautionary advisory is typically in effect from the time of the break, until 48 hours after service is restored and water quality analyses on the affected main are