

WHAT COMPOUNDS ARE 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, it dissolves naturally occurring minerals and organics and can pick up substances resulting from the presence of animal or human activity. Contaminants 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.

ENSURING WATER QUALITY

In order 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. 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's Safe Drinking Water Hotline at (800) 426-4791.

MIDDLESEX WATER COMPANY – WATER SUPPLY SOURCES AND SERVICE AREA

The Middlesex system produced 16.6 billion gallons of water in 2003. We utilize both surface and groundwater supplies during various times of the year.

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 (NJWSA). Water is diverted from the Delaware River into the D&R Canal and is supplemented by supplies from the Round Valley and Spruce Run Reservoir System. To ensure the ongoing reliability of our Middlesex delivery system, we continued with our plans to install a second raw water supply pipeline. We completed design and permitting for the line which will run from our pumping station on the D&R Canal to our treatment plant.

The New Jersey Department of Environmental Protection (NJDEP) is preparing Source Water Assessment Reports and Summaries for all public water systems, which are expected to be complete in 2004. Further information on the Source Water Assessment Program can be obtained by logging onto NJDEP's source water assessment web site at [www.state.nj.us/dep/swap](http://www.state.nj.us/dep/swap) or by contacting NJDEP's Bureau of Safe Drinking Water at (609) 292-5550. You may also contact Middlesex Water Company at (732) 634-1500, Ext. 610.

Customers throughout our service area may receive surface water, groundwater or a blend of both sources depending upon location and demands. Middlesex Water Company's water supplies are not fluoridated.

HOW YOU CAN USE WATER WISELY

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 can help preserve our water resources with minimal effort or inconvenience:

- 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.

FOR YOUR SAFETY – A MESSAGE FOR PEOPLE WITH COMPROMISED IMMUNE SYSTEMS

Certain individuals may be more vulnerable to contaminants in drinking water than the general population and have special needs regarding water quality. 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/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the **EPA's Safe Drinking Water Hotline at (800) 426-4791**.

A WORD OF CAUTION

Our treatment systems are designed and operated to produce water that is in compliance with all state and federal primary drinking water 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. This 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 and, in particular, operators of institutions (schools, hospitals, hotels/motels) and other large facilities, should follow appropriate procedures for maintaining their own plumbing systems. If you have any concerns about these matters, you can obtain additional information and guidance from the **EPA's Safe Drinking Water Hotline at (800) 426-4791**.

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/Elizabethtown Water
Carteret	Surface Water & Groundwater-North Tingley Lane/Elizabethtown Water
Colonia	Groundwater-North Tingley Lane/Elizabethtown Water & South Tingley Lane
East Brunswick	Surface Water
Edison (North)	Groundwater-North Tingley Lane/Elizabethtown Water & South Tingley Lane
Edison (South)	Surface Water & Groundwater-Park Avenue, Maple Ave. Spring Lake
Fords	Surface Water & Groundwater-North Tingley Lane/Elizabethtown Water & South Tingley Lane
Highland Park	Surface Water
Hopelawn	Surface Water & Groundwater-North Tingley Lane/Elizabethtown Water & South Tingley Lane
Iselin	Surface Water & Groundwater-North Tingley Lane/Elizabethtown Water
Keasbey	Surface Water
Marlboro	Surface Water
Menlo Park	Surface Water & Groundwater-North Tingley Lane/Elizabethtown Water & South Tingley Lane
Metuchen	Surface Water & Groundwater-Park Avenue, Maple Ave. Spring Lake
Old Bridge	Surface Water
Port Reading	Surface Water & Groundwater-North Tingley Lane/Elizabethtown Water
Raritan Center	Surface Water
Sayreville	Surface Water
Sewaren	Surface Water & Groundwater-North Tingley Lane/Elizabethtown Water & South Tingley Lane
South Amboy	Surface Water
Woodbridge	Surface Water & Groundwater-North Tingley Lane/Elizabethtown Water & South Tingley Lane

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

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 تشربها. من فضلك اذا لم تفهم هذه المعلومات اطلب من يترجمها لك.

아래의 보고는 물을 마시는 것과 관련된 중요한 정보를 담고 있습니다. 이 보고를 알지 못하는 경우 이 보고를 이해할 수 있는 사람에게 도움을 받으십시오.

এই প্রতিবেদনটি আপনার পানীয় জলের গুরুত্বপূর্ণ তথ্য নিয়ে। আপনি যদি এই প্রতিবেদনটি বুঝতে পারেন না তবে দয়া করে এটি অনুবাদ করে নেবেন।

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

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

PWSID# 1225001



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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. The Middlesex system has 31 wells, which provide a pump capacity of about 27 million gallons per day.

Middlesex Water routinely flushes its distribution lines to help ensure quality and maximum flow. Its RENEV Program was created to rehabilitate sections of unlined main throughout its distribution system.

GENERAL SAFETY SUGGESTIONS REGARDING WATER MAIN BREAKS

During main breaks or other system disruptions, Middlesex Water Company 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. This precautionary advisory is typically in effect from the time of the break, until 48 hours after service is restored and water quality analysis on the affected main are completed.

These safety suggestions 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 and have special needs regarding water quality. 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.

Based on past experience, the Company does not expect any water quality problems to be associated with main repairs. Its recommendation is simply a standard precautionary measure to better ensure the safety of its customers during distribution system and main repair work.

A Message to Our Customers:

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

Each spring, Middlesex Water Company provides its customers with a report on water quality for the prior year. We encourage you to read this report to learn about the results of testing conducted and water samples collected during 2003. We offer this information to provide you with a better understanding of all that's involved in delivering clear, clean tap water to your home

FOR MORE INFORMATION...

If you have any questions about this report or would like more information about your water quality, please call us at (732) 634-1500, Extension 610 or you may contact the Environmental Protection Agency (EPA) Safe Drinking Water Hotline at (800) 426-4791 for additional information about drinking water regulatory programs.

We invite you to become involved in decisions affecting your drinking water by sharing your comments and concerns. Please call or write to: Frank Falco, Director of Production, Middlesex Water Company, 1500 Ronson Road, Iselin, New Jersey 08830 – (732) 634-1500. The address for our website is [www.middlesexwater.com](http://www.middlesexwater.com).



HOW WE TREAT AND MONITOR YOUR DRINKING WATER

To provide you with the quality drinking water that you expect and deserve, Middlesex Water Company utilizes reliable treatment techniques for each of its water sources. Our Carl J. Olsen Water Treatment Plant in Edison, was upgraded in 1999 to ensure continued water quality and service reliability. Water quality is monitored at the Plant, at each wellfield, and throughout the distribution system to determine that state and federal water quality standards are met.

Groundwater from our wells passes through layers of soil and gravel, which act as a natural filter. Our Park Avenue and Spring Lake Wellfields in South Plainfield utilize air-stripping technology to ensure the complete removal of certain volatile organic chemicals. The Company also has eight wells in its Tingley Lane Wellfields in North and South Edison. Groundwater comes from an underground source of water known as the Brunswick Aquifer.

Surface water undergoes a multiple barrier treatment approach that involves coagulation, sedimentation, filtration and disinfection. The Company strives to balance the use of disinfectants while minimizing disinfection by-products. Since modifying our treatment process to allow for chlorination later in the treatment process, we have significantly reduced disinfection by-products, namely trihalomethanes and haloacetic acids. In addition, we are in compliance with the new, more stringent Stage I U.S. Environmental Protection Agency Disinfection/Disinfection By-Products Rule, which sets the maximum contaminant level for trihalomethanes at 80 parts per billion (ppb) and the Long Term Enhanced Surface Water Treatment Rule, which is proposed to set the level at 60 ppb.

At Middlesex Water, our staff, working in our state-certified laboratory conducts about 60,000 water quality tests each year to assure that the required level of drinking water quality is maintained. Water is tested for numerous things including bacteria, pH, color, alkalinity, volatile organic compounds (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. In 2003, we completed a security vulnerability assessment of our facilities in compliance with an EPA directive for all water utilities.



ANNUAL WATER QUALITY SUMMARY — 2003

What the Numbers Mean to You: The table shows the results of our monitoring during 2003. 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.

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. **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. **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.

Parameter	Units	MCL (State/Federal Standard)	MCLG (Ideal Goal)	Surface Water	Groundwater North Tingley Lane/ Elizabethtown	Groundwater South Tingley Lane	Groundwater Park Ave./Maple Ave. Spring Lake	Major Sources in Drinking Water	MCL Violation Yes/No
<b>Inorganic</b>									
Asbestos (Note 1)	MF/L	7	7	<0.45	Testing Waived 1994	Testing Waived 1994	Testing Waived 1994	Erosion of natural deposits	No
Barium	ppm	2	2	ND	ND	ND	<0.2 - 0.23	Discharge from metal refineries	No
Lead (Note 2)	ppb	AL=15	0	3.7	3.7	3.7	3.7	Corrosion of household plumbing	No
Copper (Note 2)	ppm	AL=1.3	1.3	0.230	0.230	0.230	0.230	Corrosion of household plumbing	No
Nitrate	ppm	10	10	1.4	1.4	2.4	2.4 - 4.2	Erosion of natural deposits	No
<b>Volatile Organic Chemicals</b>	ppb	70	70	ND	ND	ND	1.4 - 2.1	Discharge from chemical plants	No
cis-1,2-Dichloroethylene	ppb	1	0	ND	ND - 0.60	ND	0.80 - 1.2	Discharge from metal degreasing sites	No
Trichloroethylene* (Note 3)	ppb	70	0	ND	ND	ND	ND - 0.60	Leaking underground gas and fuel oil tanks	No
Methyl-t-butyl ether (MTBE)	NTU's	TT (Note 4)	N/A	100.0%	99%	N/A	N/A	Soil runoff	N/A
<b>Turbidity</b>									
<b>Microbiological</b>									
Total Coliform Bacteria	MCL: Found in > 5% of samples		0	ND	ND	ND	ND	Naturally present in the environment	No
Fecal Coliform	N/A	N/A	0	ND	ND	ND	ND	Human and animal fecal waste	No
<b>Radiological</b>									
Radium 226 & 228	pCi/l	5	0	0.13	.08 - .14	ND - 0.09	ND - 0.36	Erosion of natural deposits	No
Beta & Photon emitters**	pCi/l	50	0	3.7 - 12	6.5 - 6.6	8.8 - 15	2.9 - 6.3	Decay of natural and man-made deposits	No
Gross Alpha emitters	pCi/l	15	0	0.54 - 0.63	7.2 - 8.1	3.0 - 4.0	4.1 - 8.8	Erosion of natural deposits	No
Uranium	ppb	30	0	(Note 5)	19.9 - 20.1	19.4 - 20.9	(Note 5)	Erosion of natural deposits	No
<b>Disinfection By-Products</b>	Units	MCL (State/Federal Standard)	MCLG (Ideal Goal)	Highest level used for compliance Range	Highest level used for compliance Range	Highest level used for compliance Range	Highest level used for compliance Range	Major Sources in Drinking Water	MCL Violation Yes/No
Total Trihalomethanes ****	ppb	80	N/A	38.9 10.5 - 57.9	6.1 0.0 - 20.8	6.1 0.0 - 20.8	6.1 0.0 - 20.8	By-product of drinking water chlorination	No
Chloroform	ppb	N/A	N/A	5.6 - 45.4	ND - 10.3	ND - 10.3	ND - 10.3	By-product of drinking water chlorination	No
Bromodichloromethane	ppb	N/A	0	3.8 - 11.5	ND - 2.8	ND - 2.8	ND - 2.8	By-product of drinking water chlorination	No
Dibromochloromethane	ppb	N/A	60	1.1 - 3.2	ND - 5.4	ND - 5.4	ND - 5.4	By-product of drinking water chlorination	No
Bromoform	ppb	N/A	0	0.75 - 0.98	ND - 13.6	ND - 13.6	ND - 13.6	By-product of drinking water chlorination	No
Total Haloacetic Acids *****	ppb	60	N/A	21.4 6.7 - 45.8	3.3 ND - 15.4	3.3 ND - 15.4	3.3 ND - 15.4	By-product of drinking water chlorination	No
Monochloroacetic Acid	ppb	N/A	N/A	ND	ND	ND	ND	By-product of drinking water chlorination	No
Dichloroacetic Acid	ppb	N/A	0	2.19 - 17.90	3.20 - 7.10	3.20 - 7.10	3.20 - 7.10	By-product of drinking water chlorination	No
Trichloroacetic Acid	ppb	N/A	300	4.53 - 29.20	1.08 - 8.30	1.08 - 8.30	1.08 - 8.30	By-product of drinking water chlorination	No
Bromoacetic Acid	ppb	N/A	N/A	ND - 1.31	ND - 1.05	ND - 1.05	ND - 1.05	By-product of drinking water chlorination	No
Dibromoacetic Acid	ppb	N/A	N/A	ND - 1.50	ND - 4.70	ND - 4.70	ND - 4.70	By-product of drinking water chlorination	No
Disinfectant Residuals*****	ppm	4 ppm MRDL	4 ppm MRDLG	0.57 <0.05 - 1.20	0.57 <0.05 - 1.20	0.57 <0.05 - 1.20	0.57 <0.05 - 1.20	Result of water disinfection	No
<b>Additional Monitoring</b>									
Additional contaminants for which we monitor that are currently not regulated by the EPA									
Radon	pCi/l	CNR	0	ND - 53	1,821-1,980	2,187 - 2,321	ND - 1,539	Occurs naturally in the environment	N/A
Perchlorate	ppb	CNR	N/A	ND	1.2 - 2.1	ND	ND - 6.5	Oxygen additive in solid fuel propellant for rockets	N/A

- \*MCLs for these chemicals were set by the DEP below those set by the EPA.

\*\*EPA considers 50 pCi/l to be the level of concern for Beta Particles.

\*\*\*These MCLGs were set by the EPA and are higher than the MCLs set by the NJDEP.

\*\*\*\*Trihalomethane values used for compliance are the running annual averages of samples taken.

\*\*\*\*\*The regulations for Haloacetic Acids went into effect December 16, 2001.

\*\*\*\*\*Maximum Residual Disinfectant Levels (MRDL) and Maximum Residual Disinfectant Level Goals (MRDLG) are Maximum Disinfectant (Chlorine Residual) levels.
- Note 1:Asbestos testing was performed on the surface water in 2002. The next sampling period is 2011.

Note 2:The listed Lead and Copper concentrations are the 90th Percentile Value based on 2001 sampling. No samples exceeded the Action Level.

Note 3:Compliance is based on running annual average of quarterly sampling.

Note 4: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. The highest detected level for Turbidity is the lowest monthly percentage meeting the Turbidity MCL. The range of Turbidity for the year was 0.02 - 0.14 NTU.

Note 5:Uranium testing is performed when Gross Alpha is >15 pCi/l.



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.

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.

IMPORTANT INFORMATION ABOUT LEAD AND NITRATE

**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's 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.

HEALTH INFORMATION — Health Effects of Detected Contaminants

- Asbestos** – Some people who drink water containing asbestos in excess of the MCL over many years may have an increased risk of developing benign intestinal polyps.

**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.

**cis-1,2-Dichloroethylene** – Some people who drink water containing cis-1,2-dichloroethylene in excess of the MCL over many years could experience problems with their liver.

- 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.

**MTBE** – Some people who drink water containing MTBE in excess of the MCL over many years could experience problems with their kidneys.

**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.

**Fecal Coliform** – Fecal coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with severely compromised immune systems.

**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.

**Radon** – Radon is a radioactive gas that you can't see, taste or smell. It is found throughout the U.S. Radon can move up through the ground and into a home through cracks and holes in the foundation. Radon can build up to high levels in all types of homes. Radon can also get into indoor air when released from tap water from showering, washing dishes, and other household activities. Compared to radon entering the home through soil, radon entering the home through tap water will in most cases be a small source of radon in indoor air. Radon is a known human carcinogen. Breathing air containing radon can lead to lung cancer. Drinking water containing radon may also cause increased risk of stomach cancer. If you are concerned about radon in your home, test the air in your home. Testing is inexpensive and easy. Fix your home if the level of radon in your air is 4 picocuries per liter of air (pCi/l) or higher. There are simple ways to fix a radon problem that aren't too costly. For additional information, call your state radon program or call **EPA's Radon Hotline at (800) SOS-RADON.**