



BOROUGH OF PARK RIDGE BOARD OF PUBLIC WORKS ANNUAL WATER QUALITY REPORT JUNE 2021 (2020 SAMPLING DATA)

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*Water is life and clean water means health. –
Audrey Hepburn*

The Park Ridge Water Department is pleased to present this year's Annual Water Quality Report. This report details the results of our water quality testing performed in 2020. It is designed to inform you about the quality water and services we provide to you every day. Our goal is to provide you with a safe and dependable supply of potable drinking water.



This publication is very important because informed customers are the best allies in maintaining safe drinking water. Regular meetings of the Park Ridge Board of Public Works normally occur on the first and third Wednesday of each month, at 8:00 PM at the Park Ridge Utility Department, 15 Sulak Lane, Park Ridge. However, due to the Coronavirus emergency, these meetings are now being held virtually with conferencing software. The public is welcome to attend

In 2020, we analyzed over 2,500 samples to ensure that the 710 million gallons of water we pump, treat, and deliver meets water quality standards. We are pleased to report that we have met all of the federal and state drinking water standards.

and information on how to join the virtual meeting is posted on the Park Ridge Borough's website (www.parkridgeboro.com) prior to the meeting.

The Board of Public Works is committed to delivering a safe and reliable supply of drinking water to the 5,000 customers in Park Ridge and Woodcliff Lake. This has been the consistent goal since the water utility began its operation in the 1920's.

If you have any questions about your water please call us at (201) 391-2113. Additional information is also available on the Borough's website at www.parkridgeboro.com. You may also call the Environmental Protection Agency safe drinking water hotline at (800) 426-4791 or find it on EPA's web site at www.epa.gov.



Board of Public Works
Department of Public Utilities
Borough of Park Ridge
53 Park Ave., Park Ridge, N.J. 07656

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Where does our water come from?
Our water is supplied by groundwater from 18 wells located throughout Park Ridge and Woodcliff Lake. This water is drawn from the Brunswick Aquifer. In addition, we have three water storage tanks and five booster stations which can transfer water between different parts of the distribution system.

IMPORTANT PHONE NUMBERS			
Park Ridge Water Department Chris O'Leary - Licensed Operator	201-391-2113	NJDEP Bureau of Safe Drinking Water	1-609-292-5550
To report water emergencies during non-business hours	201-391-5400	New Jersey Board of Public Utilities	1-800-624-0241
New Jersey State Department of Environmental Protection (NJDEP)	1-609-292-3950	Environmental Protection Agency's Safe Drinking Water Hotline	1-800-426-4791

Drinking Water Quality Table

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

Substance	Units	EPA Goal MCLG	EPA Standard MCL	NJDEP Standard MCL	*Park Ridge Detected Level	Park Ridge Range	Major Sources
Inorganic Chemicals							
Nitrate	ppm	10	10	10	4.2	ND - 4.2	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Arsenic	ppb	NA	10	5	4.72	ND - 4.72	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium	ppb	2,000	2,000	2,000	598	90 - 598	Discharge of drilling waste; discharge from metal refineries; erosion of natural deposits
Chromium	ppb	100	100	100	5.85	ND - 5.85	Discharge from steel and pulp mills; Erosion of natural deposits
Nickel	ppb	NA	NA	NA	2.95	0.97 - 2.95	Erosion of natural deposits

(This category contains 11 additional constituents which were not detected)

Microbiological							
Total Coliform		0	TT	TT	0	0	Naturally present in the environment
Fecal Coliform/ <i>E. Coli</i> **		0	0	0	0	0	Human and animal fecal waste
Disinfectant Residual (Chlorine)	ppm	MRDLG=4	MRDL=4	MRDL=4	0.29	0 - 0.8	Water additive used to control microbes

Over 180 samples were collected throughout the year from our distribution system.

Radionuclides (Well #20 tested in 2020. All other wells tested in 2017)							
Alpha Emitters	pCi/L	0	15	15	7.3	1.5 - 7.3	Erosion of natural deposits
Combined Radium 226/228	pCi/L	0	5	5	1.46	0.6 - 1.46	Erosion of natural deposits
Radon (tested 6/28/99)	pCi/L	n/a	n/a	n/a	790	n/a	Erosion of natural deposits

Organic Chemicals							
cis 1,2 Dichloroethylene	ppb	70	70	70	1.72	ND - 2.30	Discharge from industrial chemical factories
Methyl Tertiary-Butyl Ether	ppb	70***	n/a	70	2.06	ND - 4.42	Leaking underground gasoline and fuel oil tanks, gasoline and fuel oil spills
Tetrachloroethylene	ppb	0	5	1	0.05	ND - 0.20	Discharge from factories and dry cleaners
Trichloroethylene	ppb	0	5	1	0.16	ND - 0.64	Discharge from metal degreasing sites and other factories

Per- and polyfluoroalkyl (PFAS) Compounds							
Perfluorononanoic Acid (PFNA)	ppt	NA	NA	13	5.28	ND - 9.34	Discharge from industrial chemical factories, sewage treatment plants, land sludge.

Disinfectant By-Products (DBPs)							
Total Trihalomethanes (TTHM)	ppb	n/a	80	80	18.94	3.15 - 20.30	By-product of drinking water disinfection
Five Haloacetic Acids (HAA5)	ppb	n/a	60	60	2.84	ND - 8.14	By-product of drinking water disinfection

* Park Ridge detected level shows the highest test results used to determine compliance for the year in 2020. For some contaminants, this level is the running annual average of data from the highest entry point. Park Ridge did not exceed any MCL during 2020.

*** NJDEP regulated chemical. MCLG is health-based number developed by the NJDEP.

(This category contains 23 additional constituents which were not detected)

Definitions:

- 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 contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
- NJRUL** - New Jersey Recommended Upper Limit
- MRDL (Maximum Residual Disinfection 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 Disinfection 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.
- ND (non-detects)** - laboratory analysis indicates that the constituent is not present.
- ppm (parts per million)** - one drop in 10 gallons, one minute in two years, or a single penny in \$10,000.
- ppb (parts per billion)** - one drop in 10,000 gallons, one minute in 2,000 years
- pCi/L (picocuries per liter)** - measure of the radioactivity in water
- Action Level** - The concentration of a contaminant which, if exceeded, triggers a treatment or other requirements, which a water system must follow

Water Conservation Tips

- 💧 Wash full loads in your washing machine, or adjust the water level to reflect the size of the load.
- 💧 Let your pots and pans soak instead of letting the water run while you clean them.
- 💧 Try planting drought-tolerant and regionally adapted plants in areas that are hard to water or that receive little use. This may include narrow strips near sidewalks or driveways and steep hills.
- 💧 Soaker hoses are better than sprays. Install drip-irrigation or soaker hoses for more efficient watering in planting beds and beneath shrubs and trees.
- 💧 Install ultra-low-flush toilets to reduce the amount of water used in each flush.
- 💧 Put dye tablets or food coloring in your toilet tank and wait to see if the color appears in the bowl (without flushing). If it does, you have a leak!
- 💧 Turn the faucet off while you shave, brush your teeth and lather up your hands.
- 💧 Take a short shower instead of a bath. While a five minute shower uses a 12 to 25 gallons, a full tub requires about 70 gallons.

How to Use Your Water Meter to Check for Leaks

Park Ridge has two types of water meters, and both can be used to help determine if you have a leak in your house. One type has mechanical totalizing digits which advance every 10 gallons. These meters have a leak indicator that will spin even when the smallest amount of water is passing through your meter. If you have all of your faucets off, and this indicator is moving, this means water is leaking somewhere.

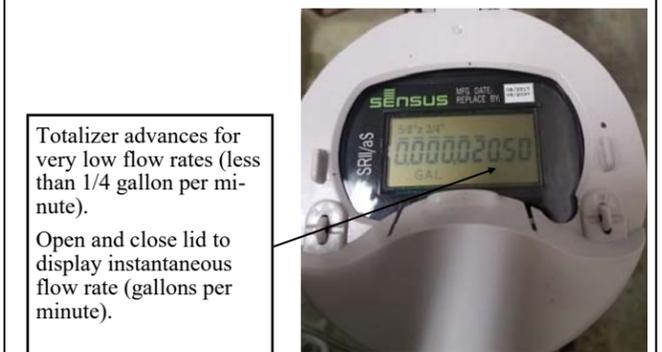
Another type of meter has an electronic digital display that is visible when you open the cover of the meter. The totalizing resolution with these meters is much smaller and will advance even if a small amount of water is running through the meter. In addition, when you open and close the lid, the display will toggle between the total gallons measure and the instantaneous flow rate (in gallons per minute). This can be useful if you are interested in knowing how much water is being used by your appliances or sprinkler system while they are running.

Mechanical Totalizing Meter



LEAK INDICATOR rotates even for very low flow of water.

Digital Totalizing Meter



Totalizer advances for very low flow rates (less than 1/4 gallon per minute).
Open and close lid to display instantaneous flow rate (gallons per minute).

Another tip is to read your water meter at night and then first thing in the morning. If there is an increase in the reading, water is leaking in your home. If you have any questions about this, please feel free to call the Water Department at 201-319-2113.

PROJECTS WE ARE DOING TO IMPROVE OUR WATER SYSTEM

- ◆ The pumping facility plant design has been completed and permits have been submitted to the NJDEP for our new “Well 21” pumping and treatment facility. This new facility will be located adjacent to the Holly Court water tank. The project is expected to go out to bid later this year, with construction completed by the summer of 2022.
- ◆ Completed the upgrade of our electronic telemetry system used to monitor and control the tanks, wells, pumping and treatment facilities.
- ◆ Replacing the carbon filter media at the Well #3 water treatment facility.
- ◆ Replacing the resin at our Well 9/15 Treatment facility.
- ◆ Once the Covid-19 emergency subsides, we will continue the implementation of the New Jersey Board of Public Utilities mandated water meter replacement and testing program.
- ◆ Purchasing automated valve exercising and vacuum machine to help maintain our water distribution system street valves.
- ◆ Performing our annual street-by-street leak detection survey.
- ◆ Ongoing water pumping facility upgrades.
- ◆ Continuing our water valve testing and exercising program.

PARK RIDGE WATER DEPARTMENT AND COVID-19

During the entire pandemic emergency, the Park Ridge Water Department has continued to provide the essential service of delivering safe drinking water to all of our customers.

In order to minimize the potential for our staff contracting the virus, we have been utilizing spilt shifts, personal protective equipment, and social distancing. This has ensured that we have our full staff available for emergencies.

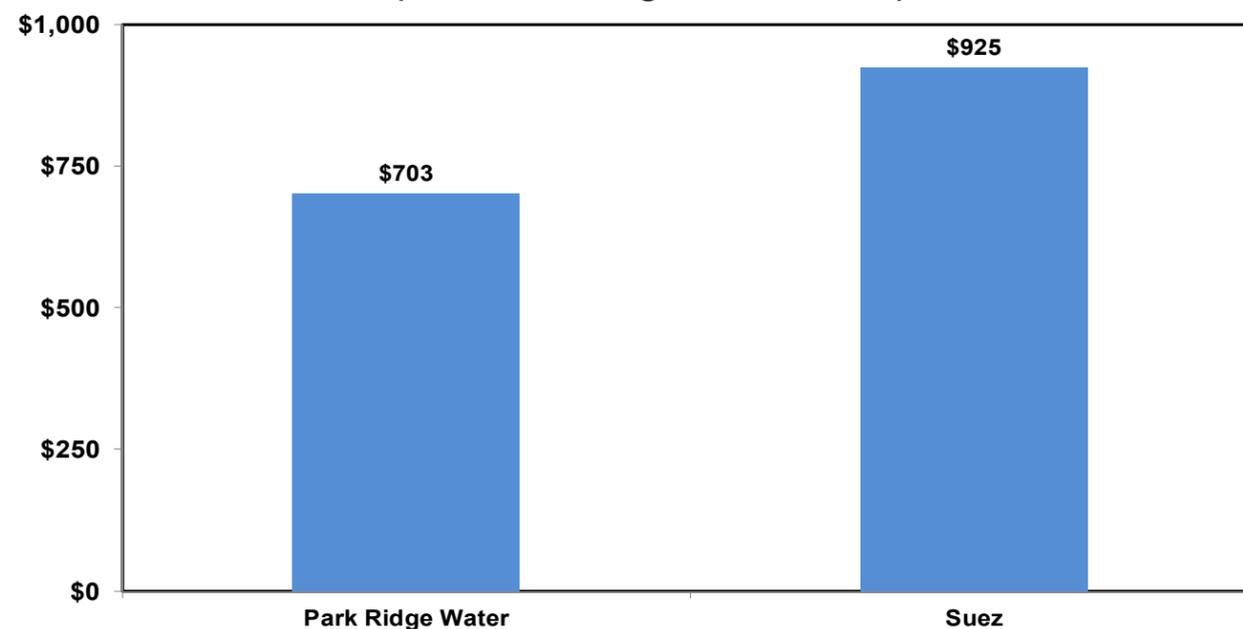
We have also discontinued all non-essential appointments at customers’ residents. This includes the replacement of water meters and other non-essential in-person appointments.

Throughout the crisis, all of the Federal EPA and New Jersey DEP required sampling has been implemented. We have also continuously maintained or water pumping facilities and distribution system infrastructure.

COVID-19 is transmitted person to person and has no impact on the quality or supply of your drinking water. Tap water is safe to drink for the entire family and there is no need to boil or filter your tap water.

If you have any questions about your water, please feel free to call the Park Ridge Water Department at 201-391-2113.

Annual Residential Water Cost Comparison (based on average residential bill)



Park Ridge’s rate is 24% less than Suez’s rate for the typical residential water customer with 5/8” meter

Drinking Water Quality Table (continued)

Lead and Copper (tested in 2019)

Substance	Units	Action Level	Number of Samples	90th Percentile	# Samples above the action level	Major Sources
Lead	ppb	15	30	2.27	0	Corrosion of household plumbing systems; erosion of natural deposits
Copper	ppb	1,300	30	638	0	Corrosion of household plumbing systems; erosion of natural deposits

Secondary Standards - related to aesthetic quality of drinking water

Substance	Units	NJ RUL	Highest Park Ridge Result	Average Park Ridge Result	Park Ridge Range	Major Sources
Chloride	ppm	250	211	127	69 - 211	Natural Mineral - Road Salt
Hardness	ppm	250	481	350	230 - 481	Natural Mineral
Manganese	ppm	0.05	0.013	0.001	ND - 0.013	Natural Mineral
Sodium	ppm	50	118.5	55.1	13.4 - 125	Natural Mineral - Road Salt
Sulfate	ppm	250	67	21.6	6 - 67	Natural Mineral
Zinc	ppm	5	0.023	0.003	ND - 0.023	Natural Mineral
Total Dissolved Solids	ppm	500	906	619	411 - 906	Erosion of Natural Mineral Deposits
pH		6.5 - 8.5	7.87	7.31	6.63 - 7.87	Natural Characteristic

Note: The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

Unregulated Compounds

Substance	Units	Standard	Average Park Ridge Result	Park Ridge Range	Major Sources
1,4 Dioxane (2016)	ppb	None	0.185	ND - 0.82	Cyclic aliphatic ether; used as a solvent or solvent stabilizer in manufacture and processing of paper, cotton, textile products, automotive coolant, cosmetics and shampoos.
Perchlorate (2020)	ppb	None	1.71	0.11- 2.11	Oxygen additive in solid fuel propellant for rockets, missiles, and fireworks; fertilizers; erosion of natural deposits.
PFOS (2020)	ppt	NA	11.50	ND - 13.2	Discharge from industrial chemical factories, sewage treatment plants, land sludge, and fire-fighting foam.
PFOA (2020)	ppt	NA	13.65	ND - 17.6	Discharge from industrial chemical factories, sewage treatment plants, land sludge, and fire-fighting foam.

Unregulated Contaminants Monitoring Rule (UCMR4)
 During 2020, Park Ridge Water participated in the fourth phase of the Unregulated Contaminant Monitoring as required by the USEPA. Unregulated contaminants are those for which the USEPA has not established drinking water standards. Monitoring assists the USEPA in determining the occurrence of these compounds and whether or not future regulation is warranted. Detections from this monitoring are summarized in the following table, along with typical sources of these compounds. More information is available at <https://www.epa.gov/dwucmr/fourth-unregulated-contaminant-monitoring-rule>

Substance	Units	Standard	Average Park Ridge Result	Park Ridge Range	Major Sources
Manganese	ppb	None	1.43	ND – 10.9	Naturally-occurring element; commercially available in combination with other elements and minerals; used in steel production, fertilizer, batteries and fireworks; drinking water and wastewater treatment chemical; essential nutrient
Haloacetic Acids (HAA5)	ppb	None	2.8	0.7 - 5.8	By-product of drinking water disinfection
Haloacetic Acids (HAA6Br)	ppb	None	4.6	1.0 - 8.9	By-product of drinking water disinfection
Haloacetic Acids (HAA9)	ppb	None	5.0	1.0 - 9.6	By-product of drinking water disinfection

What Does This Table Mean?

Our water is tested to ensure that it is safe. Major Sources shows where this substance usually originates. Range shows the highest and lowest results for the year. Definitions explain the abbreviations used in the table. We ran many analytical tests on our water. Only the listed substances in the table were detected.

The Safe Drinking Water Act regulations allow monitoring waivers to reduce or eliminate the monitoring requirements for certain contaminants. We received waivers for asbestos and synthetic organic chemicals because vulnerability assessments were performed and unambiguously showed that our system is not at risk of contamination from these contaminants.

Source Water Assessment Program

The New Jersey Department of Environmental Protection (NJDEP) has completed and issued the Source Water Assessment Report and Summary for our public water system, which is available at www.state.nj.us/dep/swap or by contacting the NJDEP, Bureau of Safe Drinking Water at 609-292-5550.

The Source Water assessment performed on 19 wells determined the following susceptibility ratings for each of the groundwater supply wells. This table illustrates the susceptibility rating for each individual well and contamination category.

Susceptibility Rating for Drinking Water Sources											
EPTDS ID	Source ID	Source Name	Location	Contaminant Category							
				Pathogens Rating	Nutrients Rating	Pesticides Rating	VOCs Rating	Inorganics Rating	Radionuclides Rating	Radon Rating	DBPs Rating
006	007	Well 1	Park Avenue	M	M	L	H	H	H	H	M
006	009	Well 2	Mill Road	M	M	L	H	H	M	H	M
007	013	Well 3	Spring Valley Road	M	H	L	H	M	M	H	M
008	015	Well 4	Oak Avenue	M	M	L	H	H	H	H	M
009	019	Well 5	Sulak Lane	M	M	L	H	M	H	H	M
009	020	Well 6	Sulak Lane	M	H	M	H	H	M	H	M
009	021	Well 7	Sulak Lane	M	H	M	H	H	M	H	M
009	022	Well 8	Sulak Lane	M	H	L	H	H	M	H	M
016	025	Well 9	Werimus Road	M	H	L	H	M	M	H	M
011	027	Well 10	Glen Road	M	H	M	H	M	H	H	M
012	029	Well 11	Russett Place	M	M	L	H	M	M	H	M
013	031	Well 12	Glendale Road	M	H	L	H	M	M	H	M
014	033	Well 13	Wield Court	M	M	L	H	H	M	H	M
015	035	Well 14	Turrett Street	M	H	M	H	H	M	H	H
016	037	Well 15	Old Mill Road	M	H	L	H	M	M	H	M
017	039	Well 16	Prospect Avenue	M	M	L	H	M	H	H	M
018	041	Well 17	Glenbrook Drive	M	H	L	H	M	M	H	H
020	045	Well 18	New Street	M	M	L	H	H	H	H	H
021	048	Well 19	Ridge Avenue	M	M	L	H	M	M	H	M

* The NJDEP has not yet performed the source water assessment for Well #20. The susceptibility ratings will be similar to Well #15

EPTDS: Entry Point to the Distribution System

L,M,H: Low, Medium and High susceptibility

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

Nutrients: Common types of nutrients include nitrogen and phosphorus. Common sources include discharge from septic fields, areas where animal waste is stored, and runoff from agricultural and residential land where fertilizers were used.

Pesticides: Pesticides are manmade chemicals used to control bacteria, fungi, weeds, rodents, and insects. Common sources of pesticides include land applications (nonpoint source) and manufacturing/distribution centers of pesticides (point source).

Volatile Organic Compounds (VOCs): Man-made chemicals that are used as solvents, degreasers, and gasoline components. VOCs are the most common organic contaminants in groundwater in New Jersey.

Inorganics: Mineral-based compounds that are both naturally occurring and manmade. Common sources include discharges from manufacturing plants, releases from contaminated sites, past land uses, and naturally occurring sources. Inorganics include arsenic, cadmium, copper, lead, mercury, and asbestos.

Radionuclides: Radioactive substances that are both naturally occurring and manmade, such as radium and radon. Common sources include the decay of naturally occurring minerals, leaching of subsurface material (for example rocks and sedimentary materials) into ground water, and improper disposal of radioactive waste.

Disinfection Byproduct (DBP) Precursors: Disinfection byproducts are formed when the disinfectants used to kill pathogens during treatment react with dissolved organic material present in the water.

If a source was rated highly susceptible for a contamination 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. If you have any questions regarding the source water assessment report or summary, please contact the Bureau of Safe Drinking Water at swap@dep.state.nj.us or 609-292-5550.

NJDEP & EPA HEALTH NOTES

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- **Inorganic contaminants**, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- **Pesticides and Herbicides**, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- **Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production and mining activities.
- **Lead:** If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Park Ridge Water Department is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or <http://www.epa.gov/safewater/lead>.
- **Arsenic:** While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drink-

ing water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

- **Radon:** Radon is a radioactive gas that you can't see, taste or smell. At high levels of exposure, it is a known carcinogen. Radon is found throughout the U.S. in soil and can move up through the ground and into a home through cracks and holes in the foundation. It can also get into indoor air when released from tap water used for showering and other household activities. Radon entering the home through tap water will in most cases be a small source of radon in indoor air. If you are concerned about radon in your home, have the air tested. It is inexpensive and easy. There are simple ways to fix a radon problem that are not too costly. Call the EPA Radon Hotline for more information at 1-800-SOS-RADON.
- **Manganese:** The recommended upper limit for manganese is based on staining of laundry. Manganese is an essential nutrient, and toxicity is not expected from levels which would be encountered in drinking water.
- **Sodium:** For healthy individuals, the sodium intake from water is not important, because a much greater intake of sodium takes place from salt in the diet. However, sodium levels above the recommended upper limit may be a concern to individuals on a sodium restricted diet.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the 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 Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.