Substances That Could Be in Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. 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 these contaminants does not necessarily indicate that the water poses a health risk.

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, in some cases, radioactive material, and substances resulting from the presence of animals or from human activity. Substances 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, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may 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 may also come from gas stations, urban stormwater runoff, and septic systems;

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

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791 or visit http://water.epa.gov/drink/hotline.
Quality First

Once again, we are proud to present our annual water quality report covering all testing performed between January 1 and December 31, 2010. As in years past, we are committed to delivering the best-quality drinking water possible. To that end, we remain vigilant in meeting the challenges of new regulations, source water protection, water conservation, and community outreach and education while continuing to serve the needs of all of our water users. Thank you for allowing us to continue providing you and your family with high-quality drinking water.

We encourage you to share your thoughts with us on the information contained in this report. Should you ever have any questions or concerns, we are always available to assist you.

Community Participation

You are invited to participate in our public forum and voice your concerns about your drinking water. We meet the first and third Tuesdays of each month beginning at 7:30 p.m. at City Hall, 1 St. Mary’s Place, Denville, NJ.

Where Does My Water Come From?

Our primary drinking water supply is from a groundwater source called the Early Mesozoic Basin Aquifer. The rock type in this aquifer is sandstone. We have five wells placed throughout the area that are used to draw from this groundwater supply. In addition to our own wells, we purchase water from the Morris County Municipal Utilities Authority (MUA). The MUA operates six wells in Alamagor, located in Randolph and Chester Township, and two wells in Flanders Valley, located in Mount Olive and Roxbury Township. These wells draw from the Upper and Lower Stratified Glacier Drift and the Lower Leithsville Limezone Formations. Customers from the south side of town receive their drinking water solely from the MUA. Customers in all other areas receive their water from the Denville Water Department. Demand for good, safe drinking water is high. We provide to our customers an average of 1.8 million gallons of water every day.

Our water supply is part of the Hackensack-Passaic Watershed, which covers an area of about 1,123 square miles. One-third of our watershed is covered by urban development, with the remainder under forest cover or used for agricultural purposes. We are entrusted to maintain this watershed property, ensuring a safe and dependable water supply to our customers. To learn more about our watershed on the Internet, go to the U.S. EPA’s Surf your Watershed Web site at www.epa.gov/surf.

Inventions

Water Conservation

You can play a role in conserving water and save yourself money in the process by becoming conscious of the amount of water your household is using and by looking for ways to use less whenever you can. It is not hard to conserve water. Here are a few tips:

- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- Turn off the tap when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank. Watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from an invisible toilet leak. Fix it and you save more than 30,000 gallons a year.
- Use your water meter to detect hidden leaks. Simply turn off all taps and water-using appliances. Then check the meter after 15 minutes. If it moved, you have a leak.

How Is My Water Treated and Purified?

Our groundwater supply is not exposed to air and is not subject to the direct pollution and contamination that a river or a reservoir may receive. In fact, because groundwater is the safest and highest quality water available to meet the public health demand of water intended for human consumption, we are able to provide your water directly from the source. However, as an additional service to our customers, we initially process our water through an air stripper to remove volatile organic compounds, like MTBE. Then we add chlorine (a precaution against any bacteria that may be present), pyroxy (for manganese removal), and caustic soda (used to adjust final pH and alkalinity) before pumping the water to sanitized, underground reservoirs, water towers, and into your home or business. We carefully monitor the amount of these water additives, adding the lowest quantity necessary to protect the safety of your water without compromising quality and taste.

Source Water Assessment

The New Jersey Department of Environmental Protection (NJDEP) has completed and issued a Source Water Assessment Report of our drinking water sources, which is available at www.state.nj.us/dep/swap or by contacting NJDEP’s Bureau of Safe Drinking Water at (609) 292-5550. The purpose of the assessments was to determine the susceptibility of each drinking water source to potential contaminant sources (PCSs) and assign a relative rating of high, moderate, or low for each source. The PCSs include: pathogens; nutrients; pesticides; volatile organic compounds; inorganics; radionuclides; radon; and disinfection by-product precursors.

The relative susceptibility rating of our water source was determined by combining the contaminant rating (number and location of PCSs within the assessment area) and the inherent vulnerability rating (i.e., characteristics or existing conditions of the watershed and its delineated assessment area). The assessment reported a susceptibility rating from low to high for our water source. This susceptibility rating does not imply poor water quality; rather, it signifies the system’s potential to become contaminated in the assessment area.

If you have any questions about these findings, please contact us during the regular business hours.

Denville Township

Philip Ted Huss – Mayor
Council Members
Donald Kuser – Council President
Thomas Anes, Gene Fitzpatrick, Christopher Golinski, Howard Shaw, Deborah Smith, Nicholas Stecyki
**Definitions**

- **Al (Action Level):** The concentration of a contaminant which would require a public health treatment or other requirements that a water system must follow.
- **MCL (Maximum Contaminant Level):** The highest level of a contaminant that is allowed in drinking water. MCLs are set close to the MCLGs as feasible using the best available treatment technology.
- **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.
- **MEF (million fibers per liter):** A measure of the presence of asbestos fibers that are longer than 10 micrometers.
- **MRL (Maximum Residue Limit):** The highest level of a contaminant allowed in drinking water below which there is no known or expected risk to health. MRLs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- **MRL(DG) (Maximum Residue Limit: Disinfectant Group):** The level of a disinfecting disinfectant below which there is no known or expected risk to health. MRL(DG) do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- **NA: Not Applicable**
- **ND (Not detected):** Indicates that the substance was not found by laboratory analysis.
- **ng/L (nanograms per liter):** A measure of radioactivity.
- **ppb (parts per billion):** One part substance per billion parts water (microngrams per liter).
- **ppm (parts per million):** One part substance per million parts water (milligrams per liter).
- **RUL (Recommended Upper Limit):** The highest level of a contaminant recommended to drinking water. RULs are set to protect the odor, taste, and appearance of drinking water.

**Information on the Internet**

The U.S. EPA Office of Water (www.epa.gov/waterhome) and Center for Disease Control and Prevention (www.cdc.gov) Web sites provide information on many issues relating to water quality, regulation, and public health. Also, the New Jersey Department of Health’s Web site (www.njdoh.state.nj.us) provides current and complete information on water issues in New Jersey, including valuable information about our watershed.

**Radon**

Radon is a radioactive gas that occurs naturally in some soil and groundwater. It may pose a health risk when the gas is released from water into air, as occurs during showering, bathing, or washing dishes and clothes. Radon gas released from drinking water is a relatively small part of the total radon in air. Radon is released into homes and groundwater from soil. Inhalation of radon gas has been linked to lung cancer; however, the effects of radon ingestion in drinking water are not yet clear. If you are concerned about radon in your home, tests are available to determine the total exposure. For additional information on how to have your home tested, call (800) SOS-RADON.

**Lead and Drinking Water**

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 accessories associated with service lines and home plumbing. Dew Ville Water is responsible for providing high-quality drinking water, but we cannot control the materials that you use in plumbing components. When your water has been sitting for several hours, you may 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 at www.epa.gov/odow/lead/