

## Town of Dewey Beach 2010 Annual Drinking Water Quality Report Sussex County Engineering Department June 6, 2011

We're pleased to present to you this year's Annual Quality Water Report. This report is designed to inform you about the quality water we deliver to you. This report will not be mailed to each customer. Copies of the report are available upon request by calling (302) 855-7730. This report is also available on Sussex County's web page.

## Sussex County is pleased to inform you that the drinking water delivered to your residence meets or exceeds all Federal and State requirements.

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 same protection for public health.

The sources of drinking water include rivers, lakes, 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 naturallyoccurring or result from urban storm water 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 storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production. They may also come from gas stations, urban storm water runoff, and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

Sussex County supplies the users within the Dewey Beach Water District with drinking water purchased from the City of Rehoboth Beach. The Columbia aquifer is the source of the water. The Division of Public Health, in conjunction with the Department of Natural Resources and Environmental Control (DNREC) has conducted source water assessments for nearly all community water systems in the state. Please contact the City of Rehoboth's Water Department at (302) 227-3194 regarding its availability and how to obtain a copy of this assessment.

The City of Rehoboth Beach has 8 wells. The raw water undergoes treatment to remove organic compounds, corrosion control and is disinfected with chlorine prior to distribution.

The State of Delaware's Department of Public Health routinely monitors the drinking water supply for the Town of Dewey Beach for constituents according to Federal and State laws. A table has been included in this report to show the results of the monitoring for the period of January 1, 2010 - December 31, 2010. It's important to remember that the presence of these constituents does not necessarily pose a health risk.

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 from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants, in addition to information about contaminants and potential health effects, can be obtained by calling the EPA Safe Drinking Water Hotline (1-800-426-4791).

All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions.

Non-Detects (ND) - laboratory analysis indicates that the constituent is not present. Parts per Million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or one penny in \$10,000.

**Parts per Billion (ppb) or Micrograms per liter -** one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

**Picocuries per liter (pCi/L)** - picocuries per liter is a measure of the radioactivity in water.

**Maximum Containment Level (MCL)** - is 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.

**Maximum Contaminant Level Goal (MCLG)** - is 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.

Maximum Residual Disinfectant Level (MRDL) - 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.

Maximum Residual Disinfectant Level Goal (MRDLG) – 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 contaminants. Action Level – the concentration of a contaminant, which, if exceeded, triggers treatment or other requirements, which a water system must follow.

**NA** – not applicable **ND** – not detectable at testing limit