

2011 ANNUAL DRINKING WATER QUALITY REPORT
PWS ID#: 7670073 SYSTEM NAME: Dover Township

Este informe contiene información importante acerca de su agua potable. Haga que alguien lo traduzca para usted, ó hable con alguien que lo entienda. (This report contains important information about your drinking water. Have someone translate it for you, or speak with someone who understands it.)

WATER SYSTEM INFORMATION:

This report shows our water quality and what it means. If you have any questions about this report or concerning your water utility, please contact Chuck Farley at 717-292-3634. We want you to be informed about your water supply. If you want to learn more, please attend any of our regularly scheduled Board of Supervisors meetings. They are held the 2nd and 4th Monday of the month, unless the date happens to be a holiday

SOURCE(S) OF WATER:

Our water sources are 10 wells located inside the physical boundaries of Dover Township. The water from our wells is disinfected as the only form of treatment. We also purchase fully treated and disinfected water from the York Water Company.

A *Source Water Protection Plan (SWP Plan)* was completed in 2010 by SSM Group, Inc. The Plan was paid for by the PA Department of Environmental Protection (Pa. DEP). The SWP Plan found that our source(s) are potentially susceptible to RCRA facilities, golf courses, transportations corridors, commercial property, gas stations, underground fuel tanks, quarries, farming and manure application practices, and natural gas pipe lines. However due to water quality monitoring and the regulation of land use activities within our well head protection areas, the risk of contamination is low.

Our SWP Plan is available for public review at the Dover Township Municipal Building, 2480 West Canal Road, Dover, PA 17315. Call Chuck Farley, PWD at 717-292-3634 is you wish to schedule a review of the SWP Plan.

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).

MONITORING YOUR WATER:

We routinely monitor for contaminants in your drinking water according to federal and state laws. The following tables show the results of our monitoring for the period of January 1 to December 31, 2011. 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 is from prior years in accordance with the Safe Drinking Water Act. The date has been noted on the sampling results table.

DEFINITIONS:

Action Level (AL) - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Maximum Contaminant Level (MCL) - 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) - 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.

Minimum Residual Disinfectant Level (MinRDL) - The minimum level of residual disinfectant required at the entry point to the distribution system.

Treatment Technique (TT) - A required process intended to reduce the level of a contaminant in drinking water.

pCi/L = picocuries per liter (a measure of radioactivity)

ppb = parts per billion, or micrograms per liter ($\mu\text{g/L}$)

ppm = parts per million, or milligrams per liter (mg/L)

DETECTED SAMPLE RESULTS:**Chemical Contaminants:**

| Contaminant | MCL in CCR Units | MCLG | Level Detected | Range of Detections | Units | Sample Date | Violation Y/N | Sources of Contamination |
|------------------------------------|------------------|------|----------------|---------------------|-------|-------------|---------------|---|
| Nitrate | 10 | 10 | 3.52 | 1.23-3.52 | PPM | 2011 | N | Runoff from fertilizer, leaching from septic tanks, sewage, erosion of natural deposits |
| Halo-acetic acids | 60 | n/a | 6.79 | 0-27 | PPB | 2011 | N | By-product of drinking water treatment |
| Total Trihalomethanes | 80 | n/a | 13.25 | 1.3-36.2 | PPB | 2011 | N | By-product of drinking water treatment |
| Trichloroethylene | 5 | 0 | 0.65 | 0-1.3 | PPB | 2011 | N | Discharge from metal degreasing sites and other factories |
| Gross Alpha | 15 | 0 | 9.09 | 0.175-9.09 | pCi/L | 8-18-2011 | N | erosion of natural deposits |
| Combined Uranium | 30 | 0 | 12.4 | 3.45-12.4 | PPB | 8-18-2011 | N | erosion of natural deposits |
| Combined Radium | 5 | 0 | 2.29 | 1.24-2.29 | pCi/L | 2008 | N | erosion of natural deposits |
| Distribution disinfectant residual | 4 | 4 | 0.86 | 0.51-0.86 | PPM | 2011 | N | Water additive used to control microbes. |

Entry Point Disinfectant Residual:

| Contaminant | Minimum Disinfectant Residual | Lowest Level Detected | Range of Detections | Units | Sample Date | Violation Y/N | Sources of Contamination |
|--------------------------|-------------------------------|-----------------------|---------------------|-------|-------------|---------------|--|
| Chlorine Residual-EP 101 | 0.40 | 0.4 | 0.4-1.15 | ppm | 2011 | NO | Water additive used to control microbes. |
| Chlorine Residual-EP 102 | 0.5 | 0.0 | 0-1.3 | ppm | 2011 | YES | Water additive used to control microbes. |
| Chlorine Residual-EP 103 | 0.6 | 0.6 | 0.6-1.3 | ppm | 2011 | NO | Water additive used to control microbes. |
| Chlorine Residual-EP 104 | 0.6 | 0.61 | 0.61-1.1 | ppm | 2011 | NO | Water additive used to control microbes. |
| Chlorine Residual-EP 105 | 0.6 | 0.61 | 0.61-1.25 | ppm | 2011 | NO | Water additive used to control microbes. |
| Chlorine Residual-EP 108 | 0.4 | 0.5 | 0.5-1.05 | ppm | 2011 | NO | Water additive used to control microbes. |
| Chlorine Residual-EP 109 | 0.5 | 0.55 | 0.55-1.1 | ppm | 2011 | NO | Water additive used to control microbes. |

| Contaminant | Action Level (AL) | MCLG | 90 th Percentile Value | Units | # of Sites Above AL of Total Sites | Violation Y/N | Sources of Contamination |
|-------------|-------------------|------|-----------------------------------|-------|------------------------------------|---------------|----------------------------------|
| Lead-2010 | 15 | 0 | 5 | ppb | 0 | N | Corrosion of household plumbing. |
| Copper-2010 | 1.3 | 1.3 | 0.19 | ppm | 2 | N | Corrosion of household plumbing. |

Microbial:

| Contaminants | MCL | MCLG | Highest # or % of Positive Samples | Violation Y/N | Sources of Contamination |
|---|--|------|------------------------------------|---------------|---------------------------------------|
| Total Coliform Bacteria | For systems that collect <40 samples/month: · More than 1 positive monthly sample For systems that collect ≥ 40 samples/month: · 5% of monthly samples are positive | 0 | 0 | N | Naturally present in the environment. |
| Fecal Coliform Bacteria or <i>E. coli</i> | 0 | 0 | 0 | N | Human and animal fecal waste. |

Raw Source Water Microbial:

| Contaminants | MCLG | Total # of Positive Samples | Dates | Violation Y/N | Sources of Contamination |
|----------------|------|-----------------------------|-------|---------------|-------------------------------|
| <i>E. coli</i> | 0 | 0 | | N | Human and animal fecal waste. |

Violations:

The entry point disinfectant residual at entry point 102 (well no. 3) dropped below the permitted minimum of 0.5 PPM in April, 2011. A boil notice was imposed on the affected area and the chemical feed problem that caused the residual drop was corrected.

We missed Synthetic Organic Chemicals (SOC) samples for the 2nd and 3rd quarters along with nitrite and nitrate samples for the 2nd and 4th quarters at entry point 106 (well no. 7), however the well was out of service in 2011 and was not providing potable water to any consumers.

We also failed to monitor for chlorine residuals as required by the Groundwater Rule that went into effect April 2011 for entry points 100, 106, and 110. These wells (1, 7, and 10) were out of service in 2011 and were not providing potable water to any consumers.

EDUCATIONAL INFORMATION:

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 run-off, 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.

In order to ensure that tap water is safe to drink, EPA and DEP prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA and DEP 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 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* (800-426-4791).

Information about 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. Dover Township 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 at <http://www.epa.gov/safewater/lead>.