

Consumer Confidence Report

Issued May, 2013

BOROUGH OF MIDDLETOWN 2012 Annual Water Quality Report

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Your Water Supplier

The Middletown public water supply system is owned by the Middletown Borough Authority and leased to the Borough of Middletown, which operates and maintains the facilities.

The Borough has operated the water system since 1957 and serves customers in Middletown, as well as 57 customers in Lower Swatara Township.

In addition, The Borough of Middletown is the exclusive wholesale provider of drinking water to the Borough of Royaltown.

Dear Customer:

This is an annual report on the quality of water delivered by the Borough of Middletown. It meets the federal Safe Drinking Water Act (SDWA) requirement for "Consumer Confidence Reports" and contains information on the source of our water, its constituents, and how it compares to (EPA) and state standards.

Safe water is vital to our community. Please read this report carefully and, if you have any questions, contact the Borough at (717)902-0706.

In 2012, we routinely tested samples of your water to assure that it met established water quality standards set by the United States Environmental Protection Agency (EPA), and the Pennsylvania Department of Environmental Protection. (Pa DEP).

We are proud to report that your water met or exceeded all of the standards for safe drinking water. All test results are kept on file and available to the public.

-- Borough of Middletown

Your Water Source

Our system is supplied by groundwater, which is pumped from 6 wells located in the Borough of Middletown. All sources are treated with chlorine, and a fluoride solution is added.

Two sources are equipped with an air stripping tower for the removal of organic chemicals.

To ensure the safety of your water, State-licensed operators monitor each source, all treatment processes, and collect water samples for analysis at State-certified laboratories.

Protecting Your Water

Groundwater used as a public water supply is less expensive to use than surface water due to land acquisition costs and various treatment requirements for surface water supplies.

However, if groundwater contamination occurs, it is very costly to treat and clean up to comply with drinking water standards. Once groundwater is polluted, it remains

contaminated for a long time and any attempt to restore water quality becomes a long and difficult process.

We recognize the possibility of potential pollution of your water supply and drafted a "Wellhead Protection Plan" (WHPP).

This plan identifies the rainwater capture areas surrounding each well and the potential sources of pollution

within each capture area. Also, the plan defines rules and procedures to be employed to prevent ground water contamination in the capture areas of each of the six (6) wells which supply your drinking water.

In addition, a Source

Water Assessment of our sources was completed by the PA Department of Environmental Protection (Pa DEP). The assessment has found that our sources of water are potentially most susceptible to:

- Please see next page

This report contains important information about your drinking water. Translate it or speak with someone who understands it.

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

-- Cont'd from Front

- Military operations
- Manufacturing and / or handling of hazardous material
- Sewer pipelines
- Facilities where release of regulated substances were detected already
- Household hazardous waste disposal
- Lawn care chemical applications in close proximity to our wells
- Auto-repair shops, gas stations
- Storage maintenance facilities
- Transportation corridors

Overall, our sources have a moderate to high risk of significant contamination.



A summary report of the Assessment is available on the Source Water Assessment & Protection Web page at

(<http://www.dep.state.pa.us/dep/deputate/water-mgt/wc/Subjects/SrceProt/SourceAssessment/default.htm>).

Complete reports were distributed to municipalities, water suppliers, local planning agencies and Pa DEP offices. Copies of the complete report are available for review at the Pa DEP Regional Office, Records Management Unit at (717) 705-4732.

We need your help to protect our groundwater sources. Find out where each of your six water supply sources are located.

Properly dispose of hazardous household products such as paint, thinners, pesticides, fuels and oils. For more information and information on the proper disposal of wastes, call 902-0706.

Why Do We Need to Test Our Water?

To ensure that tap water is safe to drink, the EPA prescribes limits on the amount of certain contaminants in water provided by public water systems.

FDA 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.

Some people may be more vulnerable to contaminants in drinking water than is 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* are available, as well as more information about contaminants and potential health effects from the Safe Drinking Water Hotline (800-426-4791).

Substances that may be present in source water

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 radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present include the following:

(a) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

(b) Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

(c) Pesticides and herbicides, which may come from a variety of sources such as agriculture, stormwater runoff, and residential uses.

(d) Organic chemical contaminants, including synthetic and volatile organics, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems.

(e) Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

Water Quality Table

During 2012 your water met or surpassed all standards for safety. This water quality table shows the substances that we detected in our water in 2012, and the amounts found, if any, were less than the amounts allowed by the EPA.

Key To Water Quality Table
AL = Action Level
MCL = Maximum Contaminant Level
MCLG = Maximum Contaminant Level Goal
MFL = million fibers per liter
NTU = Nephelometric Turbidity Units
mrem/year = millirems per year (a measure of radiation absorbed by the body)
pci/l = picocuries per liter (measure of radioactivity)
ppm = parts per million or milligrams per liter
ppb = parts per billion, or micrograms per liter
ppt = parts per trillion, or nanograms per liter
ppq = parts per quadrillion, or picograms per liter
TT = Treatment Technique
MRDL = Maximum residual disinfection level
MRDLG = Maximum residual disinfectant level goal
MinRDL = Minimum Residual Disinfectant Level

Chemical Contaminants

Contaminant	MCL	MCLG	Highest Level	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination
Arsenic	10	0	0.0033	0 – 0.0033	ppm	02/23/2012	N	Erosion of natural deposits, runoff from orchards, runoff from glass and electronics production wastes
Barium	2	2	0.35	0.11-0.35	ppm	02/23/2012	N	Drilling wastes, metal refineries & erosion of natural deposits
Chromium	100	100	0.0042	0.0038-0.0042	ppm	02/23/2012	N	Discharge from steel and pulp mills; Erosion of natural deposits
Fluoride	2	2	0.52	0.32-0.52	ppm	02/23/2012	N	Water additive which promotes strong teeth
Nitrate	10	10	5.3	3.3-5.3	ppm	05/30/2012	N	Run off from fertilizer use. Leaching from septic tanks, sewage or erosion of natural deposits
Trichloroethylene	5	0	0.54	0 – 0.54	ppm	02/13/2012	N	Discharge from metal degreasing sites and other factories

Distribution System Disinfectant Residual

Contaminant	MRDL	MRDLG	Highest Level	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination
Chlorine	4	4	1.30	0.22-1.30	ppm	12/26/2012	N	Water additive used to control microbes

Entry Point Disinfectant Residual

Contaminant	MinRDL	Lowest Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination
Chlorine	0.50	0.72	0.72 – 1.32	ppm	03/09/2012	N	Water additive used to control microbes

Microbiological Contaminants

Contaminant	MCL	MCLG	Highest Level	Sample Date	Violation Y/N	Sources of Contamination
Total Coliform Bacteria	1	0	1	August 2012	N	Naturally present in the environment

Other Violations:

- We took 26 samples to test for the presence of total coliform bacteria during August 2012. Two samples on different dates showed the presence of 1 total coliform bacteria. The standard is that no more than one sample per month may do so. An investigation determined that both samples were positive for total coliform due to the introduction of the contaminate during the sample collection procedure. PaDEP Violation # 39278

What Does The Water Quality Table Mean?

The above reporting table is based upon tests conducted in the year 2011 by the Borough of Middletown. The table lists substances which were detected in your water in 2011. Many other tests were conducted, but were not found in your water. The following are some terms used in the Water-Quality Table and in other parts of this report .

Maximum Contaminant Level or 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 or 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 Disinfection Level or 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 or MRDLG: The level of a drinking water disinfectant below which there is no known or expected risk to health. MCLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.

Minimum Disinfectant Residual or MinRDL: The minimum level of residual disinfectant required at the entry point to the distribution system.

Availability of Monitoring Data for Unregulated Contaminants

Our water system has sampled for a series of unregulated contaminants. Unregulated contaminants are those that don't yet have a drinking water standard set by the USEPA. The purpose of monitoring for these contaminants is to help EPA decide whether the contaminants should have a standard. As our customers, you have a right to know that this data is available. If you are interested in examining the results, please contact the Borough's Water Department at 717-902-0706

Water—Our Most Valuable Resource

Water makes up 2/3 of our bodies, and it is the main substance found in all living things.

Without water, life wouldn't be able to exist.

We encourage our customers to use water wisely and help protect water supplies from contamination.

Conserve Water

- Take shorter showers; install water saving shower heads.
- Repair leaks to faucets. One drip per second wastes 2400 gallons of water a year.
- Turn off the tap while brushing your teeth or shaving.
- Don't use your toilet as a trash can.
- Toilets are notorious for hidden leaks. A toilet that does not properly shut off can waste hundreds of gallons of water in one day.
- Only run dishwashers and washing machines when full.

Protect our water supplies

- Identify hazardous wastes used around and in your home. Some examples are motor oil, antifreeze, acids, insecticides, gasoline, kerosene, oil based paint, polish and varnish.
- Never dump hazardous wastes down your drain or on the ground.
- Find out where important water supplies are located and help protect the local areas around them, called "capture zones" from contamination or activities that could contaminate them. If you have a septic system, pump it out every one to three years.
- Report any suspicious activity around water pumping or storage facilities.



What You Should Know About Nitrate and Lead In Your Water

Nitrate -- We detected Nitrate in the water at a level less than the EPA standard. 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 advice from your health care provider.

Lead-- Although no lead was detected above EPA's action level, it is possible that lead levels in your home may be higher than at other homes in the community, as a result of materials used in your home's plumbing.

Infants and children are typically more vulnerable to lead in drinking water than adults.

If you are concerned about lead levels in your home's water, you may wish to have your water tested, and flush your tap prior to using it for drinking or cooking whenever the plumbing has not been used for 6 hours or more.

Additional information is available from the Safe Drinking Water Hotline (800-426-4791), or at (<http://www.epa.gov/safewater/lead>).

We encourage public interest and participation in our community's decisions affecting drinking water. Find Borough Council and Borough Authority meeting schedules on the Web at www.middletonborough.com

OFFICE HOURS

The Water Department Office can be reached Monday through Friday between 8 am and 4:30 pm at (717) 902-0706. Billing inquiries should be directed to (717) 902-0706. For Weekend and after hours water emergencies, please call (717) 9443-2895.