



ANNUAL
WATER REPORT

*Water testing
performed in 2010*

Presented By _____
Merchantville–Pennsauken
Water Commission

Quality First Quality

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 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.

Working Hard for You

Under the Safe Drinking Water Act (SDWA), the U.S. Environmental Protection Agency (U.S. EPA) is responsible for setting national limits for hundreds of substances in drinking water and also specifies various treatments that water systems must use to remove these substances. Each system continually monitors for these substances and reports to the U.S. EPA if they were detected in the drinking water. The U.S. EPA uses this data to ensure that consumers are receiving clean water.

This publication conforms to the regulation under SDWA requiring water utilities to annually provide detailed water quality information to each of their customers. We are committed to providing you with this information about your water supply because customers who are well informed are our best allies in supporting improvements necessary to maintain the highest drinking water standards.

For more information about this report, or for any questions relating to your drinking water, please call the main office at (856) 663-0043 and ask for Superintendent Jeffrey C. Whalen. Our office hours are 8:00 a.m. to 4:00 p.m., Monday through Friday.

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.

Where Does My Water Come From?

The Merchantville–Pennsauken Water Commission (MPWC) pumps groundwater from 14 wells that tap the Potomac-Raritan-Magothy (PRM) Aquifer and transmits it to the MPWC's six treatment facilities. These wells vary in depth from 140 feet to 300 feet deep. The distribution system consists of 220 miles of piping. The quantity of water that we are able to pump during any given minute, day, month, or year is strictly regulated by the New Jersey Department of Environmental Protection (NJDEP). In 1993, the NJDEP permanently reduced our permitted annual pumpage capacity. Consequently, we must augment our well water supply from other sources. Currently that source is NJ American Water Company (NJAWC). At the present time, a very small amount of water is purchased annually, which represents approximately 1 percent of our annual needs. NJAWC supplies water from three sources: surface water from the Delaware River and groundwater from the PRM and Mt. Laurel–Wenonah aquifers.

The MPWC prides itself on the above-ground water storage facilities that have been built through the years. These storage tanks greatly benefit our many customers. In total, MPWC has six (6) above-ground water tanks, with the newest located in Cherry Hill. The total capacity of the above-ground storage tanks is eight (8) million gallons of water. This type of water storage not only enhances water pressure (which is needed to take showers, sprinkle lawns, and fight fires), but it also provides over a full day's worth of water supply to our entire franchise area in case of an emergency situation.

The MPWC is committed to keeping abreast of the most recent advancements in water treatment technologies through continuous training and education. Our management staff, treatment, and transmission personnel attend training seminars and courses designed to keep us up to date and aware of better ways to serve our customers with the safest and best tasting water possible.

The MPWC has invested in the most current and modern methods for the treatment and transmission of your drinking water. In fact, the MPWC has hosted other water treatment professionals to showcase our facilities and share our success stories.

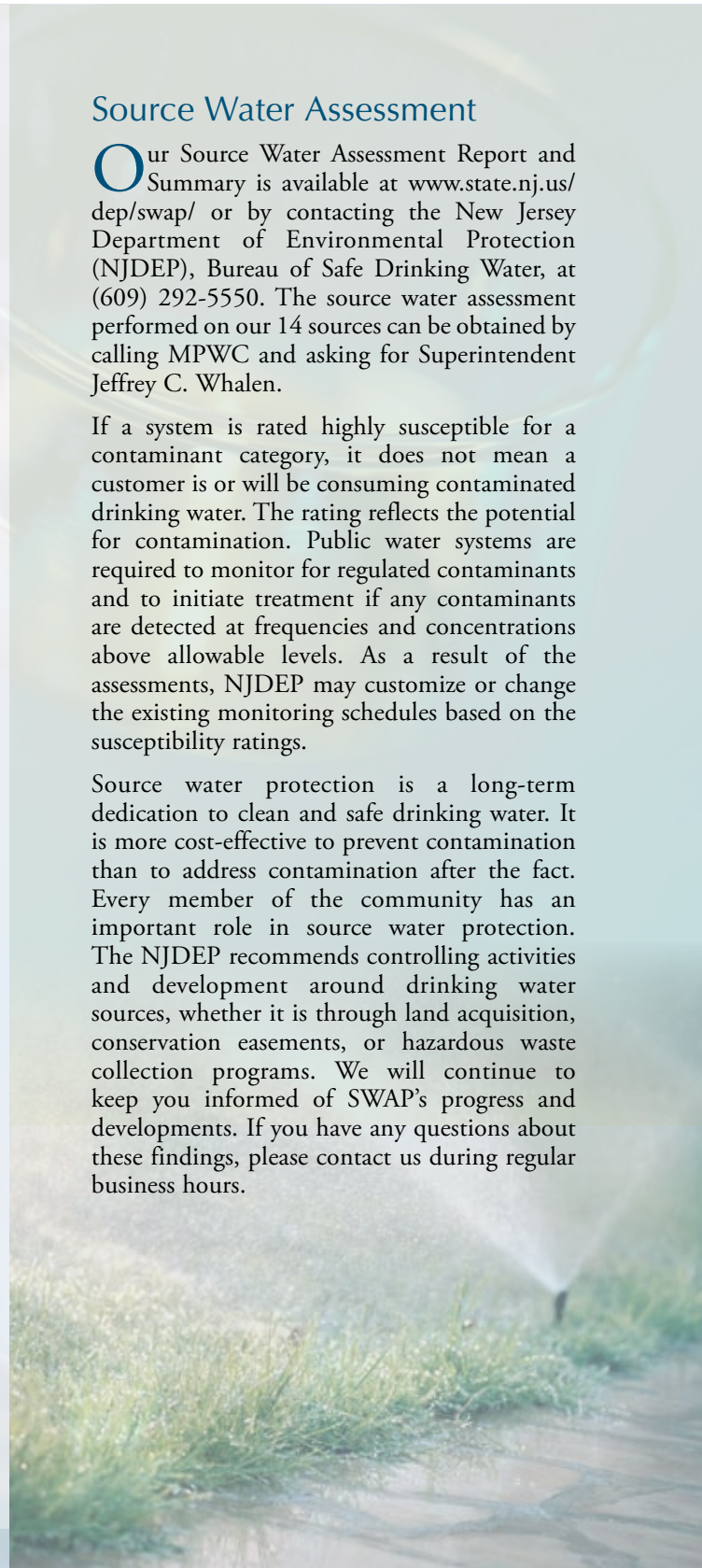
These investments of time and money have enabled the MPWC to provide a continuous and plentiful supply of clean, safe, and tasty water over the past 80+ years.

Source Water Assessment

Our Source Water Assessment Report and Summary is available at www.state.nj.us/dep/swap/ or by contacting the New Jersey Department of Environmental Protection (NJDEP), Bureau of Safe Drinking Water, at (609) 292-5550. The source water assessment performed on our 14 sources can be obtained by calling MPWC and asking for Superintendent Jeffrey C. Whalen.

If a system is rated highly susceptible for a contaminant category, it does not mean a customer is or will be consuming contaminated drinking water. The rating reflects the potential for contamination. Public water systems are required to monitor for regulated contaminants and to initiate treatment if any contaminants are detected at frequencies and concentrations above allowable levels. As a result of the assessments, NJDEP may customize or change the existing monitoring schedules based on the susceptibility ratings.

Source water protection is a long-term dedication to clean and safe drinking water. It is more cost-effective to prevent contamination than to address contamination after the fact. Every member of the community has an important role in source water protection. The NJDEP recommends controlling activities and development around drinking water sources, whether it is through land acquisition, conservation easements, or hazardous waste collection programs. We will continue to keep you informed of SWAP's progress and developments. If you have any questions about these findings, please contact us during regular business hours.



Community Participation

You are invited to participate in our public forum and voice any concerns about your drinking water. We meet the second Thursday of each month, beginning at 6:30 p.m., at our headquarters, 6751 Westfield Avenue, Pennsauken, NJ 08110.

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 components associated with service lines and home plumbing. The Merchantville–Pennsauken Water Commission 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 www.epa.gov/safewater/lead.

Sampling Results

During the past year, we have taken hundreds of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants. The table below shows only those contaminants that were detected in the water. The state requires us to monitor for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791.

| REGULATED SUBSTANCES ¹ | | | | | | | | | |
|--|--------------|------------|--------------|---|----------------|-------------------------------|----------------|-----------|---|
| | | | | Merchantville-Pennsauken Water Commission | | NJAWC-Delaware River Regional | | | |
| SUBSTANCE (UNIT OF MEASURE) | YEAR SAMPLED | MCL [MRDL] | MCLG [MRDLG] | AMOUNT DETECTED | RANGE LOW-HIGH | AMOUNT DETECTED | RANGE LOW-HIGH | VIOLATION | TYPICAL SOURCE |
| Alpha Emitters (pCi/L) | 2008 | 15 | 0 | 11.67 ² | 4.12–11.67 | NA | NA | No | Erosion of natural deposits |
| Barium (ppm) | 2008 | 2 | 2 | 0.106 | 0.037–0.106 | 0.011 ³ | NA | No | Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits |
| Bromate (ppb) | 2010 | 10 | 0 | NA | NA | 6.0 | NA | No | By-product of drinking water disinfection |
| Chlorine (ppm) | 2010 | [4] | [4] | 0.39 | 0.24–0.39 | NA | NA | No | Water additive used to control microbes |
| Combined Radium (pCi/L) | 2008 | 5 | 0 | 4.38 ² | 1.70–4.38 | NA | NA | No | Erosion of natural deposits |
| Fluoride (ppm) | 2008 | 4 | 4 | 0.11 | 0.05–0.11 | ND ³ | NA | No | Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories |
| Methyl tert-Butyl Ether [MTBE] (ppb) | 2010 | 70 | NA | 6.25 | ND–6.25 | NA | NA | No | Leaking underground gasoline and fuel tanks; Gasoline and fuel oil spills |
| Nickel (ppb) | 2008 | 100 | NA | 0.12 | 0.006–0.12 | 1.0 ³ | NA | No | Pollution from mining and refining operations; Natural occurrence in soil |
| Nitrate (ppm) | 2010 | 10 | 10 | 3.96 | 2.72–3.96 | 1.24 | NA | No | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits |
| Total Organic Carbon (% removal) | 2010 | TT | NA | NA | NA | 45 | 45–75 | No | Naturally present in the environment |
| Trichloroethylene (ppb) | 2010 | 1 | 0 | 0.82 | ND–0.82 | NA | NA | No | Discharge from metal degreasing sites and other factories |
| Turbidity (NTU) | 2010 | TT | NA | NA | NA | 0.07 | 0.05–0.13 | No | Soil runoff |
| Turbidity ⁴ (Lowest monthly percent of samples meeting limit) | 2010 | TT | NA | NA | NA | 100% | | No | Soil runoff |
| Uranium (ppb) | 2008 | 30 | 0 | 1.2 | 0.88–1.2 | 1.0 ³ | NA | No | Erosion of natural deposits |
| cis-1,2-Dichloroethylene (ppb) | 2010 | 70 | 70 | 0.64 | ND–0.64 | NA | NA | No | Discharge from industrial chemical factories |

Definitions

AL (Action Level):

The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

MCL (Maximum Contaminant Level):

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.

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.

MRDL (Maximum Residual Disinfectant 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 Disinfectant 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 contaminants.

NA: Not applicable.

ND (Not detected):

Indicates that the substance was not found by laboratory analysis.

NTU (Nephelometric Turbidity Units):

Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

pCi/L (picocuries per liter): A measure of radioactivity.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

RUL (Recommended Upper Limit):

The highest level of a contaminant recommended in drinking water. RULs are set to protect the odor, taste, and appearance of drinking water.

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

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

| SUBSTANCE (UNIT OF MEASURE) | YEAR SAMPLED | AL | MCLG | AMOUNT DETECTED (90TH% TILE) | SITES ABOVE AL/TOTAL SITES | VIOLATION | TYPICAL SOURCE |
|-----------------------------|--------------|-----|------|------------------------------|----------------------------|-----------|--|
| Copper (ppm) | 2009 | 1.3 | 1.3 | 0.01 | 0/30 | No | Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives |
| Lead (ppb) | 2009 | 15 | 0 | 5.6 | 0/30 | No | Corrosion of household plumbing systems; Erosion of natural deposits |

SECONDARY SUBSTANCES (MERCHANTVILLE-PENNSAUKEN WATER COMMISSION)

| SUBSTANCE (UNIT OF MEASURE) | YEAR SAMPLED | RUL | MCLG | AMOUNT DETECTED | RANGE LOW-HIGH | VIOLATION | TYPICAL SOURCE |
|--|--------------|------|------|-----------------|----------------|-----------|--|
| Chloride (ppm) | 2008 | 250 | NA | 0.035 | 0.018–0.035 | No | Runoff/leaching from natural deposits |
| Copper (ppm) | 2008 | 1.0 | NA | 0.024 | 0.005–0.024 | No | Corrosion of household plumbing systems; Erosion of natural deposits |
| Hardness [as CaCO ₃] (ppm) | 2008 | 250 | NA | 68.7 | 40.9–68.7 | No | Naturally occurring |
| Iron (ppm) | 2008 | 0.3 | NA | 0.042 | ND–0.042 | No | Leaching from natural deposits; Industrial wastes |
| Manganese (ppm) | 2008 | 0.05 | NA | 0.041 | 0.004–0.041 | No | Leaching from natural deposits |
| Sodium (ppm) | 2008 | 50 | NA | 25.5 | 8.49–25.5 | No | Naturally occurring |
| Sulfate (ppm) | 2008 | 250 | NA | 67 | 14–67.0 | No | Runoff/leaching from natural deposits; Industrial wastes |
| Total Dissolved Solids (ppm) | 2008 | 500 | NA | 178 | 62–178 | No | Runoff/leaching from natural deposits |
| Zinc (ppm) | 2008 | 5 | NA | 0.18 | 0.03–0.18 | No | Runoff/leaching from natural deposits; Industrial wastes |

INITIAL DISTRIBUTION SYSTEM EVALUATION RESULTS⁵

| SUBSTANCE (UNIT OF MEASURE) | YEAR SAMPLED | MCL [MRDL] | MCLG [MRDLG] | AMOUNT DETECTED | RANGE LOW-HIGH | VIOLATION | TYPICAL SOURCE |
|--|--------------|------------|--------------|--------------------|----------------|-----------|---|
| Haloacetic Acids [HAA]–IDSE Results (ppb) | 2010 | 60 | NA | 5.0 ² | ND–5.0 | No | By-product of drinking water disinfection |
| TTHMs [Total Trihalomethanes]–IDSE Results (ppb) | 2010 | 80 | NA | 24.65 ² | ND–24.65 | No | By-product of drinking water disinfection |

¹ Under a waiver granted on December 30, 1998, by the State of New Jersey Department of Environmental Protection, our system does not have to monitor for synthetic organic chemicals/pesticides because several years of testing have indicated that these substances do not occur in our source water. The SDWA regulations allow monitoring waivers to reduce or eliminate the monitoring requirements for asbestos, volatile organic chemicals, and synthetic organic chemicals. Our system received monitoring waivers for synthetic organic chemicals and asbestos.

² This level represents an average of quarterly data. Compliance is based on a running annual average.

³ Sampled in 2010.

⁴ Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of the effectiveness of the filtration system. The turbidity rule requires that 95 percent or more of the

monthly samples must be less than or equal to 0.3 NTU (no sample may exceed 1 NTU).

⁵ We were required by the U.S. EPA to conduct an evaluation of our distribution system. This is known as an Initial Distribution System Evaluation (IDSE) and is intended to identify locations in our distribution system that have elevated disinfection by-product concentrations. Disinfection by-products (e.g., HAAs and TTHMs) result from continuous disinfection of drinking water and form when disinfectants combine with organic matter that naturally occurs in the source water.