

REPORT Water-Quality 2008



BUCKS COUNTY WATER & SEWER AUTHORITY | Water Works/New Hope

SDWIS 1090130

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

BCWSA is committed to providing residents with a reliable supply of high-quality drinking water. We have our water tested using certified labs that use advanced procedures. BCWSA water meets State and Federal standards for both appearance and safety. This annual "Consumer Confidence Report," required by the Safe Drinking Water Act (SDWA), tells you where your water comes from, what our tests show about it, and other things you should know about drinking water. We are proud to report that the water provided by BCWSA meets or exceeds established water-quality standards.

Our utility has joined the Partnership for Safe Water, a new national initiative to help achieve operational excellence in water treatment. The partnership was developed through cooperation among the U.S. Environmental Protection Agency (EPA), States, and water supply associations to provide better protection for consumers from microbial contaminants that can cause intestinal illness.

Call us for information or questions about BCWSA and our water quality at 215-343-2538 x 112. Or consult our Web site at www.bcwsa.net; or see U.S. Environmental Protection Agency (EPA) water information at www.epa.gov/safewater/ or the Pennsylvania Department of Environmental Protection (PA DEP) at www.dep.state.pa.us.

WATER SOURCE

BCWSA's Water Works system is supplied water by surface water from the Delaware River at New Hope, groundwater pumped from two wells located near Village II in New Hope, and from groundwater pumped from a well located at the rear of the New Hope Manor in New Hope, Bucks County, PA.

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, 2008 to December 31, 2008. 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. The sample collection dates have been listed in parentheses on the sampling result tables.

DEFINITIONS AND ABBREVIATIONS

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

Chlorate – a byproduct of chlorine resulting from the use of liquid chlorine bleach. Regulations are not yet planned.

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 not known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.

Nephelometric turbidity units (Ntu) - turbidity is measured with an instrument called a nephelometer. Measurements are given in nephelometric turbidity units.

Picocuries per liter (Pci/l) - a measure of radioactivity

Parts per billion (ppb) - one part per billion is equivalent to one green apple in a barrel with 999,999,999 red apples.

Parts per million (ppm) - one part per million is equivalent to one green apple in a barrel with 999,999 red apples

RAA – Running Annual Average

Total Coliform - coliforms are bacteria, which are naturally present in the environment and are used as an indicator that other potentially harmful bacteria may be present.

Total Haloacetic Acids (THAAs) - a group of chemicals called infection byproducts, which form during chlorination. They will be regulated in the future. Similar but unregulated byproducts include: haloacetonitriles, haloketones, chloropicrin, chloral hydrate and total organic halides.

Total Organic Carbon (TOC) - a measure of carbon content of organic matter. The measure provides an indication of how much organic material in the water could potentially react with chlorine to form THAAs and TTHMs.

Total Trihalomethanes (TTHMs) - a group of chemicals called disinfection byproducts, which form during chlorination. TTHMs form when natural organic matter in the rivers, e.g., leaves and algae, decompose and combine chemically with the chlorine added for disinfection. Levels of TTHMs vary seasonally.

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

Microbiological Contaminants

| Contaminants | MCL | MCLG | Highest # or % of Positive Samples | Violation (Yes/No) | Typical Source of Contamination |
|-------------------------------------|-----|------|------------------------------------|--------------------|--------------------------------------|
| Total Coliform Bacteria | 0 | 0 | 0 | No | Naturally present in the environment |
| Fecal Coliform and E. coli Bacteria | 0 | 0 | 0 | No | Human and animal fecal waste |

| Contaminants | MCL | MCLG | Highest Level Detected | Sample Date | Violation (Yes/No) | Typical Source of Contamination |
|-----------------|-----|------|------------------------|-------------|--------------------|---------------------------------|
| Turbidity (NTU) | 1.0 | 1.0 | 0.097 | 11/10/08 | No | Soil Runoff |

Inorganic Contaminants

| Contaminants | MCL | MCLG | Highest Level Detected | Sample Date | Violation (Yes/No) | Typical Source of Contamination |
|---------------|-----|------|------------------------|---------------------------------------|--------------------|--|
| Arsenic (ppb) | 10 | 0 | 7.50 | 12/10/08 | No | Erosion of natural deposits |
| Nitrate (ppm) | 10 | 10 | 2.85 | 10/01/08 | No | Runoff from fertilizer use; leaching from septic tank; erosion of natural deposits |
| Barium (ppm) | 2 | 2 | 0.02 | 5/24/02 (testing required in 2011) | No | Erosion of natural deposits |

| Contaminants | Action Level (AL) | MCLG | 90th Percentile Value | # of Sites Above AL of Total Sites | Violation of TT (Yes/No) | Typical Source of Contamination |
|----------------|-------------------|------|-----------------------|------------------------------------|--------------------------|----------------------------------|
| Lead (ppb) * | 15 | 0 | ND | 0 out of 6 | No | Corrosion of household plumbing. |
| Copper (ppm) * | 1.3 | 1.3 | 0.25 | 0 out of 6 | No | Corrosion of household plumbing. |

Radioactive Contaminants

| Contaminants | MCL | MCLG | Highest Level Detected | Sample Date | Violation (Yes/No) | Typical Source of Contamination |
|--------------------|-----|------|------------------------|-------------|--------------------|--|
| Gross Beta (pCi/l) | 50 | 50 | 2.22 | 9/15/03* | No | Decay of natural and man-made deposits |

*Testing required in 2009.

Radionuclide Contaminants

| Contaminants | Violation (Yes/No) | Level Detected (RAA) | Range | MCL | MCLG | Typical Source of Contamination |
|-------------------------|--------------------|----------------------|------------|-----|------|---------------------------------|
| Gross Alpha (pCi/l) | No | .84 | 0 - 2.09 | 15 | 0 | Erosion of natural deposits |
| Combined Radium (pCi/l) | No | .87 | .41 - 1.58 | 5 | 0 | Erosion of natural deposits |
| Uranium(Ug/L) | No | 2.22 | .04 - 7.16 | 30 | 0 | Erosion of natural deposits |

Disinfectants & Disinfection By-Products

| Contaminants | MCL | Range | Average Level Detected | Sample Date | Violation (Yes/No) | Typical Source of Contamination |
|---------------------------------------|----------|------------|------------------------|-------------|--------------------|---|
| Chlorine residual (mg/L) | MRDL = 4 | 0.20 - 1.4 | 0.53 | Monthly | No | Chlorination |
| TTHMs [Total Trihalomethane] (ppb) | 80 | NA | 72 | 7/23/08 | No | By-product of drinking water chlorination |
| Haloacetic Acids (ppb) | 60 | NA | 23 | 7/23/08 | No | Water additive used for disinfection |

REQUIRED ADDITIONAL HEALTH INFORMATION

To ensure that tap water is safe to drink, 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. 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). 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 in source water include:

- (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 run off, 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, storm water 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 storm water runoff and septic systems.
- (E) Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.
- (F) 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. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.
- (G) While your drinking water meets the EPA's standards for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

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. Environmental Protection Agency (EPA) guidelines listing ways to lessen the risk by infection Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline, 800-426-4791.

CUSTOMER SERVICE

It is BCWSA's mission to provide quality customer service in an environmentally safe manner at an affordable rate. Over the past five (5) years, BCWSA has implemented a number of improvements to provide better customer service. For instance, BCWSA installed a 24-hour 7-day-a-week emergency computer response system to address after-hour customer emergencies. The customer needs only to dial 215-343-3946 and listen for the instructions. A return call is generally made within 15 minutes with on-site response typically within the hour. Additionally, BCWSA initiated bi-annual newsletters to our customers and customer service areas. These newsletters are designed to keep our customers updated on the improvements and share information about our company. An interactive Web site (www.bcwsa.net) was set up and is updated regularly to initiate a friendlier, customer service-oriented means of communication for the new millennium. Please take the time to visit the Web site. BCWSA is also a member of the Upper Bucks, Central Bucks and Lower Bucks Chambers of Commerce.

WATER EFFICIENCY MEASURES FOR RESIDENCES

Bathrooms:

- Never use your toilet as a waste basket.
- Do not let the water run while shaving or brushing teeth.
- Take short showers instead of tub baths.
- Turn off the water flow while soaping or shampooing.
- If you must use a tub, close the drain before turning on the water and fill the tub only half full. Bathe small children together.
- Never pour water down the drain when there may be another use for it - such as watering a plant or garden.

Kitchen and Laundry:

- Keep drinking water in the refrigerator instead of letting the faucet run until the water is cool.
- Wash fruits and vegetables in a basin. Use a vegetable brush.
- Do not use water to defrost frozen foods, thaw in the refrigerator overnight.
- Use a dishpan for washing and rinsing dishes.
- Scrape, rather than rinse, dishes before loading into the dishwasher.
- Add food wastes to your compost pile instead of using the garbage disposal.
- Operate the dishwasher only when completely full.
- Use the appropriate water level or load size selection on the washing machine.

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