



# 2008 CONSUMER CONFIDENCE REPORT

## what's INSIDE

- Greetings from United Water
- Where Does Your Water Come From?
- Conservation Tips
- Your Water Quality Table

# 08

## DEAR CUSTOMER

Water quality represents a vital aspect of the service provided to you by United Water Pennsylvania. It is central to all that we do as your water supplier.

We are committed to providing our customers with water that meets or surpasses all applicable drinking water standards set by the United States Environmental Protection Agency (EPA) and Pennsylvania Department of Environmental Protection (PADEP). Our water quality personnel strive to provide each customer with high quality water and dependable service, 365 days a year.

As part of this commitment, we test the water sent to your connection regularly to be sure that it meets the standards. These test results are on file with the PADEP, the state agency that monitors and regulates drinking water.

Please review this report and feel free to give us a call at 717.564.3662 or toll-free at 888.299.8972 if you have questions about your water or service. If you have specific questions about water as it relates to your personal health, we recommend that you contact your health care provider.

During 2008, United Water Pennsylvania invested several million dollars to replace aging infrastructure throughout our service territory. The infrastructure replacement projects focus on older water mains that are either undersized or have reached their useful life. The projects were also conducted in cooperation with local government officials so that roadway disruptions were minimal.

We appreciate the opportunity to serve you with dependable water service.

Sincerely,



John D. Hollenbach  
Vice President & General Manager

## CRYPTOSPORIDIUM

Cryptosporidium is a microbial pathogen found in surface waters throughout the U.S. Although filtration removes Cryptosporidium, the most commonly-used filtration methods cannot guarantee 100% removal. The US EPA issued a new rule in 2006 that requires public water systems to monitor their source waters for the presence of Cryptosporidium. Systems with higher levels of Cryptosporidium in the source waters need to provide additional treatment. Our monitoring in 2008 indicated the presence of these organisms in our Yellow Breeches Creek source water at low levels. Based on the 2006-2008 results, no additional treatment is required.

## HEALTH NOTE

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 infections by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at 800.426.4791.





## ABOUT YOUR WATER SUPPLY

United Water Pennsylvania owns and operates two water treatment plants in the Mechanicsburg area. The Richard C. Rabold Water Treatment Plant draws source water from the Yellow Breeches Creek, a surface supply with a 200-square-mile watershed. Source groundwater, drawn from a 115-foot well in the Borough of Mechanicsburg, provides the supply for our Market Street Water Treatment Plant.

Mechanicsburg Operation customers benefited from an investment of over \$1 million in infrastructure replacement projects during 2008. This included installation of new water mains, a new booster station, pumps, valves and related electrical equipment.

## WHO WE ARE

United Water provides water and wastewater services to over 7 million people in the United States. In addition to owning and operating regulated utilities, United Water operates municipal systems through public-private partnerships and contract agreements. Three of the nation's largest water and wastewater contracts are operated by United Water.

## ABOUT THE TREATMENT PROCESS

United Water Pennsylvania treats approximately 2.8 million gallons of water per day to serve the Mechanicsburg area. Those south of the Cumberland Parkway receive water treated at the Rabold Plant while customers north of the Cumberland Parkway receive water treated at both the Rabold and Market Street plants. Fluoride is added to the treated water by municipal edict to help prevent tooth decay.

To further ensure the safety of your water, we monitor it before, during and after the treatment process at a state-certified analytical laboratory. At United Water Pennsylvania, we take great pride in our ability to provide you with drinking water that meets or surpasses all state and federal standards.

*EPA Safe Drinking Water Hotline: 800.426.4791*

## INDOOR WATER TIPS

- Install water-saving showerheads and faucets to cut down significantly on water flow. Also, save water by replacing washers on leaky faucets.
- Turn off the tap while brushing your teeth.

Using less water in the home will reduce water and heating bills. More importantly, the cumulative effect of many people practicing personal water conservation will help to ensure adequate water supplies.

## SOURCE WATER PROTECTION

The Pennsylvania Department of Environmental Protection completed a Source Water Assessment for United Water's Mechanicsburg well in 2003. The Source Water Assessment provides information to support local and state efforts to protect the source water quality. The assessment pertains to the groundwater basin that provides water to the Mechanicsburg well. The emphasis of the assessment is on "source" (well) water rather than "tap" (treated) water. The source water is then treated for drinking water use.

The Source Water Assessment for Mechanicsburg's well indicates that the source sensitivity to contamination of the well is high because volatile organic compounds have been detected in the

groundwater in this area. The water source is most vulnerable to potential contamination from the following: auto repair shops, construction, furniture refinishing, gas stations and manufacturing. A copy of the Source Water Assessment is available for review at the DEP's South-Central Regional Office. Call DEP at 717.705.4708 for an appointment. An Executive Summary of the report can be accessed on the DEP's website at [www.dep.state.pa.us/eps](http://www.dep.state.pa.us/eps), by selecting the "Surface Water Assessment Summary Reports" link.

## CUSTOMER SAFETY AND EMPLOYEE IDENTIFICATION

United Water Pennsylvania reminds customers that individuals may pose as utility workers and to be vigilant and report any suspicious activity to your local law enforcement authorities. You will recognize United Water employees by their photo identification badge they wear on their blue uniforms. The badge includes a color picture of the employee along with their name and the date the card was issued. We encourage you to ask to check ID badges to verify that the person with whom you are dealing is an official employee of

United Water. Always feel free to call us at 717.564.3662 (Harrisburg/Mechanicsburg) or 888.299.8972 (outside the Harrisburg/Mechanicsburg calling area) to confirm that we have sent an employee to your home.

### IMPORTANT INFORMATION

- Please pass this information along to those who speak Spanish, Portuguese, Korean, Gujarati or Arabic.
- Este informe contiene información muy importante sobre su agua beber. Tradúzcalo ó hable con alguien que lo entienda bien.
- Este reporte contem informações importantes sobre a sua água de beber. Traduza-o ou fale com alguém que o compreenda.

• આ અહેવાલ મને તમારા પાવાના પાણી વિષે અગત્ય નો માહિતગારી આપવા માટે આવી છે. એનો અનુવાદ કરો અથવા જેને સમજાવી પડતી હોય તેના આર્થિક સાધનો ફરી

• للمعلومات فى هذا التقرير تحتوى على معلومات مهمة عن مياة الشرب التى تشربها. من فضلك اذا لم تفهم هذه المعلومات اطلب من يترجمها لك.

• 아래의 보고는 귀하께서 드시는 식수에 대한 중요한 정보가 포함되어 있습니다. 번역을 하시든가 아니면 이 보고를 알고 이해하시는 분과 의논 하시기를 바랍니다.



## SUBSTANCES EXPECTED IN DRINKING 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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA Safe Drinking Water Hotline at 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, 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 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 byproducts 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 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. So what's the bottom line? Both bottled and tap water meet the federal standards, however, your tap water is substantially less expensive.

## WATER CONSERVATION

We encourage our customers to use water wisely – even when supplies are abundant. If you don't conserve, you're pouring water – and money – down the drain. The average American consumes an average of between 40 and 130 gallons of water per day by drinking water, showering and flushing. You can reduce your water consumption by up to 25 percent by taking just a few simple steps. So tighten those taps, cease those sprinkles, discontinue those drips and use water wisely! To learn more about how you can

conserve water and reduce your water bill, visit our website at [www.unitedwater.com/uwpa](http://www.unitedwater.com/uwpa) or give us a call at 717.564.3662 (Harrisburg/Mechanicsburg) or 888.299.8972 (outside the Harrisburg/Mechanicsburg calling area).

## NITRATE

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 for advice from your health care provider.



# DRINKING WATER QUALITY TABLE

This water quality table shows how your drinking water compared to the standards set by the USEPA and the PADEP in 2008. Please note that yearly testing on all substances is not required. Therefore, for such substances, we have indicated the most recent year of required testing.

We tested for more than 120 substances in the water and detected only those indicated in the Drinking Water Quality Table. Some of the information is technical in nature so we have provided you with definitions to help you better understand the information contained in this report.

## PRIMARY STANDARDS DIRECTLY RELATED TO THE SAFETY OF DRINKING WATER

| <b>Turbidity</b>  | <b>MCLG</b>  | <b>MCL</b>  | <b>Result Rabold WTP</b>         | <b>Result Market St.</b>         | <b>Range of Results</b> | <b>Violation</b>                          | <b>Likely Source</b> |
|---|--------------|-------------|----------------------------------|----------------------------------|-------------------------|---|----------------------|
| Turbidity $\leq 1$ NTU  | NA           | TT*         | 0.46                             | 0.29                             | 0.020 - 0.46            | No  | Soil erosion         |
| Turbidity $\leq 0.3$ NTU  | NA           | TT**        | 99.4                             | 100                              | 99.4 - 100              | No  | Soil erosion         |
| * Treatment Technique requires no single measurement greater than 1 NTU, highest measurement reported.  |              |             |                                  |                                  |                         |   |                      |
| ** Treatment Technique requires at least 95% of monthly samples to be less than or equal to 0.3 NTU, lowest monthly percent reported.   |              |             |                                  |                                  |                         |   |                      |
| <i>Turbidity is a measure of the clarity or cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.</i>                    |              |             |                                  |                                  |                         |   |                      |
| <b>Inorganic Chemicals</b>  | <b>MCLG</b>  | <b>MCL</b>  | <b>Highest Result Rabold WTP</b> | <b>Highest Result Market St.</b> | <b>Range of Results</b> | <b>Violation</b>                          | <b>Likely Source</b> |
| Fluoride ppm  | 2            | 2           | 1.8                              | 1.3                              | 0.4 - 1.8               | No  | Treatment process    |
| Nitrate ppm*<br>agricultural activity   | 10           | 10          | 1.9                              | 5.3                              | 1.9 - 5.3               | No  | Natural mineral and  |
| * See Nitrate section for more information.   |              |             |                                  |                                  |                         |   |                      |
|   | <b>MCLG</b>  | <b>AL</b>   | <b>90th Percentile</b>           | <b>Samples &gt;AL</b>            |                         | <b>Violation</b>                          | <b>Likely Source</b> |
| Copper ppm (2007)   | 1.3          | 1.3         | 0.22                             | 0                                |                         | No  | Household plumbing   |
| Lead ppb (2007)   | 0            | 15          | 2                                | 0                                |                         | No  | Household plumbing   |
| <b>Disinfection Byproducts</b>  | <b>MCLG</b>  | <b>MCL</b>  | <b>Result</b>                    | <b>Range of Results</b>          | <b>Violation</b>        | <b>Likely Source</b>                      |                      |
| Haloacetic Acids ppb  | NA           | 60          | 33                               | ND - 37                          | No                      | Treatment process                         |                      |
| Total Trihalomethanes ppb   | NA           | 80          | 25                               | 2 - 66                           | No                      | Treatment process                         |                      |
| Total organic carbon removal*   | NA           | TT          | 1.0                              | NA                               | No                      | Naturally occurring                       |                      |
| * Source water total organic carbon is less than or equal to 2.0 ppm; therefore no removal is required. Alternative Compliance Criteria (ACC) was used to determine removal compliance. |              |             |                                  |                                  |                         |   |                      |
| <b>Disinfection Residuals</b>   | <b>MRDLG</b> | <b>MRDL</b> | <b>Result</b>                    | <b>Range of Results</b>          | <b>Violation</b>        | <b>Likely Source</b>                      |                      |
| Chlorine residual (distribution system) ppm   | 4            | 4           | 1.4 (highest)                    | 1.1 - 1.4                        | No                      | Water additive used to control microbes   |                      |
| Chlorine residual (Rabold Plant)* ppm   | 4            | 4           | 0.29 (lowest)                    | 0.29 - 2.9                       | No                      | Water additive used to control microbes   |                      |
| Chlorine residual (Market Plant)* ppm   | 4            | 4           | 1.55 (lowest)                    | 1.55 - 3.2                       | No                      | Water additive used to control microbes   |                      |
| * Represents the chlorine residual on treated water entering the distribution system.   |              |             |                                  |                                  |                         |   |                      |
| <b>Volatile Organic Chemicals</b>   | <b>MCLG</b>  | <b>MCL</b>  | <b>Result</b>                    | <b>Range of Results</b>          | <b>Violation</b>        | <b>Likely Source</b>                      |                      |
| Tetrachloroethylene ppb   | 0            | 5           | 0.6                              | ND - 0.6                         | No                      | Discharge from factories and dry cleaners |                      |

### Disinfection Byproducts Study

The US EPA finalized a new regulation in 2006 called the Stage 2 Disinfectants-Disinfection Byproducts Rule (Stage 2). This rule requires our public water system to perform additional sampling throughout our distribution system for total trihalomethanes and haloacetic acids. This sampling is known as the Initial Distribution System Evaluation or IDSE. The monitoring period for this IDSE takes place in 2008 and 2009. The results of this study will be used to determine new compliance sampling locations for the Stage 2 Rule. The range of results of the samples collected in 2008 for our system is shown below.

UWPA Mechanicsburg IDSE Results

Total Trihalomethanes (ppb): 22 - 40  
 Haloacetic Acids (ppb): 21 - 42

## 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 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 disinfectant to control microbial contamination.

**NA:** Not applicable.

**ND:** Not detected.

**NTU:** Nephelometric Turbidity Unit.

**ppb Parts per billion:** The equivalent of one second in 32 years.

**ppm Parts per million:** The equivalent of one second in 12 days.

**Primary Standards:** Federal drinking water regulations for substances that are health-related. Water suppliers must meet all primary drinking water standards.

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

**>:** This means "greater than."

**≤:** This means "less than or equal to."

## YOU CAN MAKE A DIFFERENCE

You can make a difference in keeping our waterways clean if you take steps to prevent nonpoint source pollution (NSP) or people pollution. This is the contamination of our water supplies resulting from average daily activities. With each rainfall, pollutants such as fertilizers, pesticides, motor oil and litter are washed into storm drains that flow into our waterways or soak into the ground to contaminate the water below. The good news is that each of us can keep our environment cleaner by practicing a few simple "good earth-keeping" techniques. Put litter and pet waste in its proper place. Avoid overusing fertilizers and pesticides and follow directions carefully when using them. Don't dump motor oil in storm drains, on the ground or in streams. Recycle as much as possible and dispose of household hazardous products properly. By following these tips, you can protect and improve the quality and safety of our water supply.

## WHERE DOES YOUR WATER COME FROM?

Two water treatment plants provide water to customers in the Mechanicsburg area. One draws water from the Yellow Breeches Creek in Fairview Township. The source of supply for the other facility is a well in the Borough of Mechanicsburg. Both share a common distribution system.



**United Water Pennsylvania  
Mechanicsburg Operation**  
4211 East Park Circle, Harrisburg, PA 17111

**THIS REPORT  
CONTAINS  
IMPORTANT  
INFORMATION  
ABOUT YOUR  
DRINKING WATER.**

PWSID # 7210028

## OUR HISTORY

United Water Pennsylvania consists of geographically separate water systems serving a population of over 160,000 people in 40 municipalities, encompassing portions of eight counties.

Customer satisfaction is the goal of nearly 90 employees throughout our statewide operations whose combined efforts provide for the delivery of an average of 19 million gallons of water per day. Our employees consist of highly experienced engineers, water plant operators, water quality specialists, transmission and distribution system maintenance personnel, service technicians, meter readers and customer service representatives.



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OPEN  
HERE