# Perkasie Regional Authority Annual Drinking Water Quality Report

FOR OUR CUSTOMERS IN PERKASIE BORO, E. ROCKHILL TWP, HILLTOWN TWP & W. ROCKHILL TWP

## PERKASIE REGIONAL AUTHORITY

STEWARDSHIP OF WATER RESOURCES MISSION STATEMENT:

DEDICATED TO PROVIDING A WATER
SUPPLY OF HIGHEST QUALITY TO ITS
CUSTOMERS AND PROTECTING THE
WATER RESOURCES IN
THE BOROUGH OF PERKASIE AND
EAST ROCKHILL TOWNSHIP

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

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

#### **Lawn Watering**

- Can range from 7 gallons per square foot of yard up to 40 gallons
- When watering beds and pots, use a slow drip hose that will make sure the water gets into the ground
- Never water during the day and never use oscillating sprinklers which allow over half of the water to evaporate
- Always use native plants so watering does not have to be done on a regular basis

Perkasie Regional Authority 306 N. 5th St. PO Box 159 Perkasie, PA 18944-0159 215-257-3654 Fax 215-257-5590 www.perkasieauthority.org e are pleased to present to you this year's water quality report which includes data for the year 2011. This report is designed to inform you about the quality water and services we deliver to you every day.

Perkasie Regional Authority (Public Water Supplier ID #1090046) is committed to ensuring clean and safe drinking water for every customer. We work around the clock to provide the highest quality water at the most reasonable cost possible to every tap every day.

If you have any questions concerning this report or your Water Authority, please contact us by phone at 215-257-3654, via email at info@perkasieauthority.org or by attending one of our regularly scheduled meetings normally held on the First Monday & Third Tuesday of each month at the Authority office located at 306 N. 5th St. at 7:00p.m.

wnat's inside	
Water Quality Report	.2-6
Health Advisory	3
Sources of Contaminants	3
Ensuring Quality	3
Lead in Drinking Water	5
Educational Information	6
Unregulated Contaminants	6
New Employee	6
Construction Update	7
Customer Notification	7
PRA operations center	7

## 2011 ANNUAL DRINKING WATER QUALITY REPORT PERKASIE REGIONAL AUTHORITY PWSID#: 1090046

#### **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 Perkasie Regional Authority at 215-257-3654. We want you to be informed about your water supply. If you want to learn more, please attend any of our regularly scheduled meetings. They are held the first Monday and third Tuesday of each month at 7:00 pm at the Perkasie Regional Authority Office, 306 N. Fifth St., Perkasie, PA 18944.

## SOURCE(S) OF WATER:

Our water source is comprised of several municipal wells in the Borough of Perkasie as well as East Rockhill Township. A Source Water Assessment of our source(s) was completed in 2005 by the PA Department of Environmental Protection (PADEP). The Assessment has found that our sources have a high sensitivity because of detection of Volatile Organic Compounds (VOC's) and the presence of naturally occurring arsenic. However, they are potentially most susceptible to contamination from transportation corridors and agricultural activities. Overall, our sources have little risk of significant contamination. For a copy of the complete assessment, please contact us.

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/CEC guidelines on appropriate means to lessen the risk of infections 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.

# IMPORTANT HEALTH ADVISORY

There are some people who may be more vulnerable to contaminants in drinking water than the general population. Examples of those who are at higher risk are:

- •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 for infections.

These people should seek advise about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.

Learn more by visiting EPA's website:

www.epa.gov/safewater

## SOURCES OF CONTAMINANTS:

PRA has met or exceeded all standards set for quality and safety. However, all sources of drinking water are subject to potential contamination either naturally occurring or man made.

Contaminants that may be present in ground 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 storm water 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 storm water runoff, and residential uses; Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial process and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems; and Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

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During 2011, samples were tested at QC Labs, Inc., Southampton, PA (215)355-3900 and Benchmark Analytics, Inc., Center Valley, PA 18034 (610)974-8100

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More information about contaminants and potential health effects can be obtained by calling EPA's Safe Drinking Water Hotline at 1-800-426-4791.

## **Ensuring Quality Drinking Water**

The use of ground water requires very little source water treatment. The water recharging the underground water storage aquifers is filtered through the earth and rocks as it makes its way down to the underground storage area. Precipitation in the form of rain or snow is generally "soft" water. As it filters through the ground, it picks up minerals such as calcium and magnesium which changes it to "hard" water. Generally, the most noticeable draw back to "hard" water is less suds in your washer or while you shampoo and the calcium (white crystals) build-up in your hot water tanks. Therefore, the only treatment added to the water is **chlorine** for disinfecting and a food grade **polyphosphate** called Aqua Mag to control scaling and corrosion. We also filter a portion of the water at Wells number 10 & 11 through a ferric oxide media (iron) to reduce the Arsenic level below the Drinking Water Standard of 10 ppb.

#### **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.

**Maximum Contaminant Level (MCL)** – The highest level of 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.

**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

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

#### **DETECTED SAMPLE RESULTS:**

Chemical Contaminant	MCL in CCR units	MCL G	Highest Level De- tected	Range of Detec- tions	Unit	Sample Date	Viola- tion Y/N	Sources of Contamination
Arsenic	10	0	9.6	1.9 to 9.6	ppb	12/13/11	N	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium	2	2	0.141	.00650 to .141	ppm	11/08/06	N	Discharge from drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Selenium	50	50	6.5	nd to 6.50	ppb	11/08/06	N	Corrosion of house- hold plumbing system; Erosion of natural deposits; Discharge from mines

Arsenic: While your drinking water meets EPA's standard for arsenic, it does contain levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs 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. The standard is determined by a running annual average. Our average for the year was 8.0 ppb.

Chemical Contami- nant	MCL in CCR units	MCLG	Highest Level De- tected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contami- nation
Uranium	30	0	6.40	1.192 to 6.40	p/Cu/L	12/13/2011	N	Erosion of natural deposits
Combined Radium (226&228)	5	0	2.122	.889 to 2.122	pCi/L	12/13/2011	N	Erosion of natural deposits
Gross Al- pha Emit- ters	15	0	8.26	.411 to .826	pCi/L	12/13/2011	N	Erosion of natural deposits
TTHM Total Triha- Iomethanes	80	n/a	24.00	24.00 to 24.00	ppb	08/09/2011	N	By-product of water chlorination
HAA Haloacetic Acids	60	n/a	5.97	5.97 to 5.97	ppb	08/09/2011	N	By-product of drinking water disin- fection
Chlorine	4 MRDL	4 MRDLG	1.43	0.00 to 1.43	ppm	12/13/2011 04/11/2011	N	Water addi- tive used to control mi- crobes

Contaminant	Action Level (AL)	MCLG	90th Percentile Value	Units	# of Sites above AL of Total Sites	Sample Date	Violation of TT Y/N	Sources of Contamination
Lead	15	0	0.00168	ppb	0 out of 30	06/08/2010	N	Corrosion of household plumbing
Copper	1.3	1.3	0.377	ppm	0 out of 30	06/08/2010	N	Corrosion of household plumbing

#### **Lead in 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. Perkasie Regional Authority 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 <a href="https://www.epa.gov/safewater/lead">https://www.epa.gov/safewater/lead</a>."

#### **EDUCATIONAL INFORMATION:**

The source 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 my 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).

## <u>Unregulated Contaminant Monitoring Rule 3</u> (UCMR3)

Beginning next year, we will be sampling another series of unregulated contaminants under the direction of the Environmental Protection Agency (EPA). This round of sampling goes from 2013 through 2015. The purpose of this type of sampling is to determine either the presences or absences of particular contaminants. Sampling points for the contaminants will be at the point of entry of each of our wells and also at strategic points in the distribution system.

## New Employee

We would also like to take this opportunity to introduce our new Staff member. Stefan Green has joined the Perkasie Regional Authority as a System Operator. Stefan comes to us from Dublin Borough and is a licensed water and sewer operator. Stefan has over 15 years of experience in the water/sewer industry. Stefan



ter/sewer industry. Stefan and his wife reside in Quakertown with their children.

#### **Construction Update**

Another way we strive to provide you the cleanest water possible is by replacing outdated lines and services. This year we plan to replace a vintage 1920 water main in 3rd Street between Callowhill and Market Streets. The existing 4" and 6" cast iron will be replaced with 6" PVC pipe. All service lines will be replaced up to the curb line. Unfortunately, the Authority cannot be responsible for any damage to the house side of the service, especially where the private portion of the line is galvanized or lead. Portions of the sewer main will also be replaced.

We also plan on replacing a 1930's line in North 7th Street between Brown Street and Buttonwood Street. We have experienced a number of breaks along this line in the past few years. The existing 6" line will be replaced with 8" PVC pipe. The service lines will also be replaced under the same conditions as above.

Over the last several years the Authority has replaced over 50,000 feet of water main in keeping with our commitment to provide you the best water system possible for quality, quantity, pressure and fire protection.

#### **Customer Notification**

Over the last few years, the Authority has endeavored to improve communications with our customers. First and foremost is our website (<a href="www.perkasieauthority.org">www.perkasieauthority.org</a>) which we try to update weekly. The second is by our automated phone/email system, <a href="Rapid Response">Rapid Response</a>. The initial intent of Rapid Response was to allow us to notify you immediately of any emergency with the water supply (ie: line breaks, quality problems, etc.). In order to reduce costs we have also started notifying customer of past due amounts.

In order for the system to be as efficient as possible, it is important that we have correct, updated phone numbers and email addresses. Please ensure we have your correct information by: 1) setting up your on-line account and updating your phone number and email address; 2) emailing us your contact information to info@perkasieauthority.org or 3) calling us at 215-257-3654.

In the hopes of trying to keep costs as low as possible for you, our customers, we are trying to obtain as many email addresses of our customers as possible and then implement Ebillings. This will allow us to email our customers a reminder that their bill is available online to view or actually email a copy of their bill directly to them.

We would also appreciate any feedback from you as to whether or not these steps we are taking to keep you better informed are helpful to you and if you would be interested in receiving emails regarding your account.

## Perkasie Regional Authority's Operation Center

The Authority is advertising for proposals for our new operations center as this report is being prepared. As stated in other correspondences we have sent in the past, the growth of the Authority coupled with the age of our current location and the inability to bring it up to today's Building Codes and regulations affordably have made this new facility necessary. The building has been planned to serve our customers for at least 50 years, both operationally as well as administratively.



\*\*Architect's rendering of the proposed Perkasie Regional Authority's operations center to be located at 150 Ridge Road Sellersville, Pennsylvania (between the Comcast building and the new Regional Police Station building).

#### PERKASIE REGIONAL AUTHORITY

306 N. 5th Street P.O. Box 159 Perkasie, PA 18944-0159 Presorted Bulk Mail U.S. Postage PAID Permit No. 92 Perkasie, PA 18944

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## **Our Board Members:**

Lawrence Gular Chairman Benjamin Rainear, Vice-Chairman Robert Wasson, Secretary J. Thomas Horn, Treasurer David Watt, Asst. Sec/Treas

FOR EMERGENCIES
OUR STAFF IS AVAILABLE
24 HOURS A DAY
at
215-257-3654

## **Our Staff:**

Gary J. Winton, Manager
Raymond M. Conville, Asst. Mgr.
Nicholas Fretz, Financial Officer
Kathy Bitner-Brown, Accts Rec.
Patricia Fluck, Admin. Asst.
Mark Erenius, Sys. Supervisor
Mark Kelly, Sys. Operator
Mike Kerr, Sys. Operator
Dean Leach, Sys. Operator
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