

PERKASIE REGIONAL AUTHORITY

January 2017

Annual Drinking Water Quality Report

Produced for our Perkasio Borough, East Rockhill Township, West Rockhill Township and Hilltown Township customers



Perkasie Regional Authority Stewardship of Water Resources Mission Statement:

Dedicated to providing a water supply of the highest quality to it's customers and protecting the water resources in the Borough of Perkasio and East Rockhill Township

We are pleased to present to you this year's water quality report which includes data for the year 2016. 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.

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

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

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@perkasioauthority.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 150 Ridge Road, Sellersville, PA at 7:00p.m.



DO **NOT** Flush...

- ✓ Baby wipes or diapers
- ✓ Disposable or "flushable" wipes/toilet cleaning wands
- ✓ Paper towels

- ✓ Pesticides
- ✓ Paint
- ✓ Pharmaceuticals

- ✓ Feminine products
- ✓ Fat, Grease, Oil
- ✓ Kitty litter

REMEMBER – It's a Toilet, Not a Trash Can!



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2016 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, 150 Ridge Road, Sellersville, PA 18960.

Sources 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 our office.

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 table shows the results of our monitoring for the period of January 1 to December 31, 2016. 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:

- **People with HIV/AIDS or other immune system disorders**
- **Some elderly and infants can be particularly at risk for infections**
- **Immuno-compromised persons such as persons with cancer undergoing chemotherapy**
- **Persons who have undergone organ transplants**

Anyone with these risk factors 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.

Samples were tested at Eurofins QC Inc., Southampton, PA (215)355-3900

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)

ND = no detection

Detected Sample Results

Chemical Contaminant	MCL in CCR units	MCL G	Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination
Antimony	6	6	.23	ND to .23	ppb	2012	N	Discharge from natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Arsenic	10	0	8.4	2.3 to 9.5	ppb	2013 & 2015	N	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes.
Barium	2	2	0.11	0.0059 to .11	ppm	2012	N	Discharge from drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Cadmium	5	5	.11	ND to .11	ppb	2012	N	Corrosion of galvanized pipes; Erosion of natural deposits; Discharge from metal refineries; Runoff from waste batteries and paints.
Chlorine	4 MRDL	4 MRDLG	1.35	.520 to 1.19	ppm	2016	N	Water additive used to control microbes.
Chromium	100	100	3.6	.87 to 3.6	Ppb	2012	N	Discharge from steel and pulp mills; Erosion of natural deposits.

Detected Sample Results (Continued)

Chemical Contaminant	MCL in CCR units	MCLG	Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination
Combined Radium (226&228)	5	0	.466	.452 to 2.122	pCi/L	2014	N	Erosion of natural deposits.
Combined Uranium	30	0	5.761	1.776 to 5.982	ppb	2012	N	Erosion of natural deposits.
Fluoride	2	2	1.4	ND to 1.4	ppm	2016	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Gross Alpha Emitters	15	0	2.52 to 4.92	2.52 to 4.92	pCi/L	2014	N	Erosion of natural deposits.
HAA Haloacetic Acids	60	n/a	5.7	2.8 to 5.7	ppb	2016	N	By-product of drinking water disinfection.
Nitrates	10	10	.555	ND to .555	ppm	2016	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Selenium	50	50	5.0	ND to 5	ppb	2012	N	Corrosion of household plumbing system; Erosion of natural deposits; Discharge from mines.
Thalium	2	.5	.24	ND To .24	ppb	2012	N	Leaching from ore-processing sites; Discharge from electronics, glass, and drug factories.
TTHM Total Trihalomethanes	80	n/a	35.2	28.4 to 35.2	ppb	2016	N	By-product of water chlorination

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	1.5	ppb	0 out of 30	2016	N	Corrosion of household plumbing
Copper	1.3	1.3	0.501	ppm	0 out of 30	2016	N	Corrosion of household plumbing

Important Water Quality Information

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. Perkasio 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 <http://www.epa.gov/safewater/lead>."

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 8.4 ppb.

Fluoride

While your water meets EPA's standards for fluoride, it does contain low levels of fluoride. Perkasio Regional Authority does not use fluoride as an additive, the fluoride that is detected is from the erosion of natural deposits; or discharge from fertilizer and manufacturing. The EPA warns that while low levels of fluoride can help prevent cavities, children under nine years of age may develop cosmetic discoloration of their permanent teeth (dental fluorosis) by drinking water that contains more than 2 parts per million. Dental fluorosis, in its moderate or severe forms, may result in brown staining and or pitting of the permanent teeth. This problem occurs only in developing teeth, before they erupt from the gums. Drinking water containing more than 4 parts per million of fluoride (the U.S. Environmental Protection Agency's drinking water standard) can increase your risk of developing bone disease. Perkasio Regional Authority has reported forty-three samples for fluoride in the past 5 years, forty of those samples have been a non-detection. The highest of the three samples that had detectable levels was 1.4 ppm, below the risk & actionable limits. The Department of Environmental Protection has set the actionable limit at 2 ppm and the Environmental Protection Agency has set the actionable limit at 4 ppm.

PFOA & PFOS

Due to the recent health concerns regarding PFOA's and PFOS's we elected to voluntarily re-sample all four of our water system's entry points on September 22nd 2016. Currently PFOA's and PFOS's have a combined HAL (Health Advisory Limit) of 70 ppt. Although our results have come back with detectable levels they are well below the HAL. The Authority will continue to monitor the health effects and actionable levels of PFOA's and PFOS's, as well as other new and existing contaminants. The Authority's most recent results of each entry point and how they will be reported to DEP are listed below. As always the Perkasio Regional Authority is dedicated to providing our customers with the cleanest water, in the most efficient ways possible.

Important Water Quality Information (Continued)

PFOA & PFOS Test Results

<u>Well #4</u>	<u>Well #7</u>	<u>Well #10</u>	<u>Well #11</u>
PFOA – 3.5 ppt	PFOA – 2.8 ppt	PFOA – 6.3 ppt	PFOA – 2.2 ppt
PFOS – 11 ppt	PFOS – 3.4 ppt	PFOS – 6.4 ppt	PFOS – 2.1 ppt
TOTAL – 14.5 ppt	TOTAL – 6.2 ppt	TOTAL – 12.7 ppt	TOTAL – 4.3 ppt

Construction Updates

Approved Developments

There are currently 4 approved development projects inside the Borough. **Perkasie Woods** which sits next to the Perkasie Square Shopping Center is approved for 144 townhomes. Sewer and Water mains are installed and completed, service to homes will be installed on an as-built basis.

Country Ridge is approved for 18 single family homes, 9 of which are built, with 9 remaining.

Perkasie Green is located at the old Nace's Greenhouse property at the corner of East Walnut Street and Constitution Ave. It has been approved for 49 townhomes which replaced the original approval for 140 age restricted units.

Construction is slated to begin sometime in 2017.

Hidden Meadow is located on a tract of land off of N. Main Street, near Callowhill Road. It is approved for 48 single family homes, 25 of which are slated to begin construction in 2017.

Up-Coming Projects

In 2016 PRA applied for a PA small water and sewer utility grant. This grant, if awarded would help defer some of the costs associated with a specifically designed project or upgrade. PRA chose to submit the grant on behalf of the Ridge Road Reservoir Replacement project. We are currently in the design phases of the project, which would encompass draining, cleaning, a new lining, and a new cover for the reservoir. PRA has already had geo-stability tests completed, and received quotes and estimates for project costs. In 2015 we completed the same type of project with our Park Avenue storage tank in accordance with our preventative maintenance plan.

PRA will be working with the Borough of Perkasie in accordance with their road replacement and resurfacing plan again in 2017. This enables PRA to replace or rehabilitate aging infrastructure as the Borough is also rehabbing roads in Perkasie to avoid having to dig up newly paved roads for water or sewer main repairs. We will update affected customers as well as our website as we get more information on the approved roads and project dates.

Educational Information

The source of drinking water (both tap water and bottled water) includes 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 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).



Valuable Information

Arsenic Values



Arsenic is measured in parts per billion. 1 part per billion is the equivalent to a drop of water in an Olympic swimming pool, or one grain of sand out of a bath tub filled with it. DEP regulations are measured on a “rolling average” each year. So although a result above 10 ppb may occur, it does not trigger a violation. PRA has two wells that sit in the New-Brunswick aquifer where, due to rock formations, arsenic is a naturally occurring semi-metal. Arsenic can also come from agricultural or industrial practices. PRA strives to provide the cleanest possible water to its customers and is constantly evaluating its processes and researching alternatives to do so.



Customer Alerts!

Changes to Customer Payment Arrangements/Plans EFFECTIVE JULY 1, 2016

In order for the Authority to improve cash flow, The PRA Board has decided to update the Rules and Regulations and with that have reviewed and updated the Fee Schedule. For a copy of the entire Rules and Regulations, please visit our website at www.perkasieauthority.org. Below is an example of the additional/updated fees:

Example

January 1 st	Bill Date (bill sent to customers)
January 3 rd	Email is sent notifying customers bills were taken to the US Post Office
January 20 th	<u>Bill is DUE</u>
January 21 st	10% late penalty added after 12:00 p.m.
February 10 th	An automated telephone call to customer informing them of outstanding bill and additional fees to be added (on February 20 th)
February 20 th	Additional 5% late penalty added (on the balance of the original charges)
March 1 st	An automated telephone call to customer informing them of outstanding bill and that additional fees to be added to account (on March 15 th)
March 15 th	Additional 5% Door Posting Fee (on the balance of the original charges) and Customer Door Posted
March 20 th	Certified Letter is sent to customer and \$10 fee is added
March 31 st	Door Posted/Property Shut Off and \$30 added to account for shut off of services (last day of month)

NOTE #1: To turn services back on after shut off for non payment, an additional fee of \$30 will be added to the account (\$60 after normal business hours).

NOTE #2: These fees are added to all customers with balances due regardless of payment plan/arrangements.

Just a reminder that the above is an example of a Cycle B January 1st bill. Again, the billing cycles and corresponding bill dates for the other cycles are below:

Cycle A:	March 1 st	June 1 st	September 1 st	December 1 st
Cycle B:	January 1 st	April 1 st	July 1 st	October 1 st
Cycle C:	February 1 st	May 1 st	August 1 st	November 1 st



Address
150 Ridge Road
Sellersville, PA 18960

Phone

215-257-3654

In an Emergency, we can be contacted 24 hours a day at the above number

Email

info@perkasieauthority.org

Please visit our website at
www.perkasieauthority.org

Meetings Schedule

Perkasie Regional Authority meets at 150 Ridge Road, Sellersville, PA at 7:00 p.m. on the 1st Monday and 3rd Tuesday of each month

Please visit our website at
www.perkasieauthority.org
for a list of all meeting dates

Meetings are open to the public for questions or concerns.

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Changes to How You Receive Your Annual Drinking Water Quality Report

Under State and Federal law, the Authority is required to provide each and every customer with this report. This includes each and every apartment building, school, home, etc. We are also required to post it on the internet as well as in the library and municipal offices. The printing and mailing of these reports is a very expensive process, costing thousands of dollars which has to be passed on to our customers. Within the last two (2) months, the EPA has revised the requirements on delivery of these reports. We now must notify you that the report is online and provide you a link to go directly to the report. You can also call and request a report be sent to you. As stated above, the reports will also be available at your municipal office or the Perkasie library. In addition, PRA will be mailing our annual Flushing Notice post cards that will indicate that the 2016 Annual Drinking Water Quality Report is available online.