

**ATTENTION BOROUGH OF EMMAUS RESIDENTS
IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER**

**ENVIRONMENTAL PROTECTION AGENCY (EPA)
LIFETIME HEALTH ADVISORY EXCEEDENCE**

**ESTE INFORME CONTIENE INFORMACION IMPORTANTE ACERCA DE SUE AGUA POTABLE. HAGA QUE
ALGUIEN LO TRADUZCA PARA USTED, O HABLE CON ALGUIEN QUE LO ENTIENDA.**

**The Borough of Emmaus has levels of Perfluorooctane sulfonate (PFOS) / Perfluorooctanoic acid
(PFOA) above EPA Lifetime Health Advisory Levels**

Our water system recently exceeded the EPA Lifetime Health Advisory Level for PFOS / PFOA. Although this incident was not an emergency, as our customers, and our residents, you have a right to know what happened and what we are doing to correct this situation.

Testing results that were received on February 5, 2024, show that our system exceeds EPA Lifetime Health Advisory Level for PFOS / PFOA. The Lifetime Advisory Level for PFOS is 14 parts per trillion (14 ng/L) and 18 parts per trillion (18 ng/L) for PFOA. PFOS / PFOA levels exceeding this level were found at both Well #1 and Well # 2 within the Borough. Both wells share the same aquifer. Well # 1 tested at an elevated level of 310.2 ng/L per tests conducted by the Borough. Well # 2 tested at 1,201 ng/L per test conducted per tests conducted by the Borough. Well # 2 has been disconnected and deactivated since initial test results were received in October 2021. Well # 1 remains operations, however, a mandatory detailed feasibility study was recently completed to select a proper treatment option of the water system. The Borough is in the process of engineering and applying for emergency permits to install remediation systems on both wells.

What should I do?

You are not required to use an alternative (e.g., bottled) water supply, per PA DEP, as these chemicals are not currently regulated chemicals for water supply systems. However, if you have specific health concerns, consult your doctor. We also recommend conducting your own research as well as reading the information presented in Borough newsletters. Options might include the purchase of a carbon or reverse osmosis water filtration system or using alternative water sources until the permanent solution is in place, which is estimated to take up to two years because of the complexity of the system.

What does this mean?

Per PA DEP's advisement, this is not an immediate risk. However, exposure to PFOS and PFOA over certain levels may result in adverse health effects, including developmental effects to fetuses during pregnancy or to breastfed infants (e.g., low birth weight, accelerated puberty, skeletal variations), cancer (e.g., testicular, kidney), liver effects (e.g., tissue damage), immune effects (e.g., antibody production and immunity), thyroid effects, and other effects (e.g., cholesterol changes). The EPA calculates health advisory levels to offer a margin of protection against adverse health effects to the most sensitive populations: fetuses during pregnancy and breastfed infants. A recent USGS study indicates that over 45% of all drinking water in the US contains PFAS.

What are PFOS and PFOA?

PFOS and PFOA are chemicals that are part of a larger group referred to as perfluoroalkyl substances (PFAS). These chemicals are manmade and do not occur naturally in the environment. Because these chemicals have been used in a number of consumer products, most people have been exposed to them.

PFAS often shows up on items such as wild caught fish, dust particles, food that was packaged in different types of containers (such as popcorn), cleaning products, stain resistant carpet, water repellant clothing, non-stick cookware, fast food wrappers, pizza boxes, candy wrappers, and even certain plastic containers you drink from. PFAS has been found in surface water and rainwater. The chemical stability of PFOS and PFOA also makes them very persistent to the environment. As is the case in the Borough's situation, PFOS is also contained in firefighting foam.

What happened? What was done?

The aquifer that feeds Well # 1 and Well # 2 is directly adjacent to the Borough's Fire Training Facility. Well # 2 is located directly adjacent to the facility. The facility has hosted firefighting training for fire departments across Lehigh County for approximately 5 decades. Over the years, firefighting foam was commonly used to extinguish fires during training and practice. As is the case in most instances, PFOS was not a knowingly harmful product. It was not until three years ago that fire departments were informed that PFOS was a harmful agent to water sources. At that time the Borough immediately stopped using this type of foam and prohibited its use at the Fire Training Grounds. However, the Borough was advised that we should keep the foam on hand in case of a large fire. Therefore, we continued to store extra foam at our facility, until recently. It is important to note that this is the first time the wells have tested at elevated levels for these chemicals.

The Borough of Emmaus is continuing to work with PA DEP to address the elevated PFOS/PFOA levels. Initial steps included the immediate shut down of Well#2, issuance of Public Notification, and continued monitoring of PFOS/PFOA levels in the drinking water. A feasibility study was recently completed. The Borough is in the process of applying for PA DEP permits to build the appropriate mitigation system. Engineering is ongoing.

Because Well # 1 is a crucial part of the Borough's water system, the Borough cannot sustain shutting the well down for an extended period of time. Emmaus Borough Council was required to conduct a full feasibility study by PA DEP. The study examined all possibilities to remediate this issue. Possible solutions included digging a new well, outsourcing our water supply from another municipality, and treatment options. During our series of public meetings, members of the public were overwhelmingly in favor of purchasing a treatment system. The system is currently in the engineering design phase, and the Borough will be pursuing permits from PA DEP in the very near future. Our consultants have stated that it could take up to two years to complete the project at a cost of nearly \$16 million.

The Borough will continue to monitor both wells and test them quarterly, even after the purchase of the new carbon absorption system. If the level of Well # 1 continues to be elevated, the Borough will explore all options to take corrective action. Well # 2 will continue to be offline until the carbon system is purchased. The Borough is also conducting testing of all other wells in the Borough. Tests have shown all levels to date are either undetectable or within acceptable ranges as prescribed by PA DEP.

It is also important to note that a recent study conducted showed that nearly 50% of all drinking water in the nation and 76% of all Pennsylvania streams contain these harmful chemicals.

For more information, please contact the Director of Public Works or Borough Manager at 610-965-9292.

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Emmaus Borough Manager