

## 2018 ANNUAL DRINKING WATER QUALITY REPORT

**PWSID #: 7220044**

**NAME: Harrisburg International Airport**

*Este informe contiene importante acerca de su agua potable. Haga que alguien lo traduzca para usted, ó hable con alguien que lo entienda. (This report contains important information about your drinking water. Have someone translate it for you, or speak with someone who understands it.)*

### **WATER SYSTEM INFORMATION:**

The Susquehanna Area Regional Airport Authority (SARAA) which operates the Harrisburg International Airport (HIA) provides this report to show our water quality and what it means. If you have any questions about this report or concerning your water utility, please contact Scott Snoke at 717-948-3900 x4608. This report is also available on our website at [www.flyhia.com](http://www.flyhia.com). We want our valued customers to be informed about their water quality.

### **SOURCE(S) OF WATER:**

The Airport water source consists of ten groundwater wells. Wells #1, #2, #3, #4 and #5 are located at the East End of the airport. Wells #6, #9, #11, #12 and #13 are located at the central part of the airport.

At one time or another, all of the wells were found to have volatile organic compounds (known as VOCs) in the water. To treat this condition, the Groundwater Remediation Facility was constructed in 1988 and went online in May of 1990. Water from all of the wells online flows through this building. There the water is softened and airstripped, to remove 99% of VOCs, and is chlorinated to ensure proper disinfection. During 2014, the Unregulated Contaminant Monitoring Rule 3 (UMCR3) requirement discovered that a drinking water sample collected exceeded the provisional Health Advisory Levels (HAL) of an EPA selected group of Per-Fluorinated Compounds (PFC), specifically PFOS >0.2 ppb for drinking water samples collected during February and June 2014. Immediate Actions taken during June 2014 included Tier 3 Public Notification & PA DEP/EPA consultation, isolation of Wells 6, 9, & 13, in addition the water storage and distribution systems were flushed to remove and lower PFC concentration below HAL and subsequent confirmatory sampling was performed. The follow-up actions conducted were, a meeting with the PA DEP/EPA and reporting that 'Drinking Water Problem Corrected' occurred during August 2014. During May 2016 the EPA issued a revised HAL to lower the concentration that was previously issued. (see Sample Results Table)

### **MONITORING YOUR WATER:**

Subsequent PFC monthly samples and laboratory analysis have been performed since these initial actions took place. 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, 2018. The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Lead and copper sampling was conducted during June 2016 at sample location representative of the HIA water distribution system.

### **WHAT IS BEING DONE:**

SARAA is currently working to install a wellhead filtration treatment system at Well #12 using Granular Activated Carbon (GAC) media. SARAA expects that this technology will enable SARAA to

maintain combined PFOS / PFOA concentrations well below the lifetime health advisory limits. In the longer term, SARAA intends to install the same GAC technology at the airport's water treatment plant within the next two to three year timeframe.

**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 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.

*Minimum Residual Disinfectant Level (MinRDL)* - The minimum level of residual disinfectant required at the entry point to the distribution system.

*Not Detected (ND)* – Indicated that the analyte result was not detected at the reporting detection limit.

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

ppb = parts per billion, or micrograms per liter  
(µg/L)

**DETECTED SAMPLE RESULTS:**

<b>Chemical Contaminants</b>								
<b>Contaminant</b>	<b>MCL in CCR Units</b>	<b>MCLG</b>	<b>Level Detected</b>	<b>Range of Detections</b>	<b>Units</b>	<b>Sample Date</b>	<b>Violation Y/N</b>	<b>Sources of Contamination</b>
21 regulated VOC's (EPA Method 502.2)	Various	Various	ND	ND	ppb	Various	N	Various sources including run off, leaching, and factory discharges
IOC's (InOrganic Compounds, ex. Barium)	Various	Various	ND	ND	ppm	7/24/2018	N	Various sources
Barium	2	2	0.039	0.039	ppm	7/24/2018	N	Erosion of natural deposits
Nitrate	10	10	3.3	3.3	ppm	8/14/2018	N	Runoff from fertilizer use.
Nitrite	10	10	ND	ND	ppm	8/14/2018	N	Runoff from fertilizer use.
Trihalomethanes (Total THM)	80	0	Average result 23.9	20.9 – 26.8	ppb	8/14/2018	N	By-product of drinking water disinfection
HaloAcetic Acids (Total HAA)	60	0	Average result 2.6	2.1 – 3.1	ppb	8/14/2018	N	By-product of drinking water disinfection
Perfluorooctanoic Acid (PFOA) Perfluorooctanesulfonic Acid (PFOS)	Lifetime HAL 0.070 PFOA & PFOS Total	Lifetime HAL 0.070 PFOA & PFOS Total	Average result 0.041	0.012 – 0.065	ppb	01/2018-12/2018	N	Firefighting foam and various other sources

<b>Distribution System Disinfectant Residual</b>							
<b>Contaminant</b>	<b>MCDLG</b>	<b>MRDL</b>	<b>Range of Detections</b>	<b>Units</b>	<b>Sample Date</b>	<b>Violation Y/N</b>	<b>Sources of Contamination</b>
Free Chlorine Residual	4	4	0.15 – 1.26	ppm	Various	N	Water additive used to control microbes.

<b>Contaminant</b>	<b>Action Level (AL)</b>	<b>MCLG</b>	<b>90<sup>th</sup> Percentile Value</b>	<b>Units</b>	<b># of Sites Above AL of Total Sites</b>	<b>Violation Y/N</b>	<b>Sources of Contamination</b>
Lead (2016)	15	0	ND	ppb	0	N	Corrosion of building plumbing.
Copper (2016)	1.3	0	0.16	ppm	0	N	Corrosion of building plumbing.

<b>Microbial</b>					
<b>Contaminants</b>	<b>MCL</b>	<b>MCLG</b>	<b>Highest # or % of Positive Samples</b>	<b>Violation Y/N</b>	<b>Sources of Contamination</b>
Total Coliform Bacteria	For systems that collect <40 samples/month: • More than 1 positive monthly sample	0	0	N	Naturally present in the environment.
Fecal Coliform Bacteria or <i>E. coli</i>	0	0	0	N	Human and animal fecal waste.

**OTHER VIOLATIONS: None**

**EDUCATIONAL INFORMATION:**

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 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 storm water runoff, and commercial or 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 fueling activities, gas stations, urban storm water 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).

### **HEALTH EFFECTS:**

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 infection by *Cryptosporidium* and other microbial contaminants are available from the *Safe Drinking Water Hotline* (800-426-4791).

### **Information about Lead**

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 building plumbing. Harrisburg International Airport is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. Lead and copper sampling will be conducted again during 2019.

To reduce exposure 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>.

### **Information about PFC's (see EPA, PA DEP, & PA Dept. of Health Fact Sheet links below)**

EPA Fact Sheet PFOA and PFOS Drinking Water Health Advisory

[https://www.epa.gov/sites/production/files/2016-06/documents/drinkingwaterhealthadvisories\\_pfoa\\_pfos\\_updated\\_5.31.16.pdf](https://www.epa.gov/sites/production/files/2016-06/documents/drinkingwaterhealthadvisories_pfoa_pfos_updated_5.31.16.pdf)

PA DEP Information Sheet

<http://files.dep.state.pa.us/Water/DrinkingWater/Perfluorinated%20Chemicals/PA%20DEP%27s%20PFC%20Information%20Sheet.pdf>

PA DOH Information Sheet

<http://files.dep.state.pa.us/RegionalResources/SERO/SEROPortalFiles/Community%20Info/EastonRoadPFC/PA%20Department%20of%20Health%20Fact%20Sheet-%20PFOS%20and%20PFOA.pdf>