

PFAS: What You Need to Know

What are PFAS?

Per- and polyfluoroalkyl substances (PFAS) are a group of man-made chemicals that do not exist naturally in the environment. It has been estimated that the PFAS family may include more than 12,000 chemical substances; however, the two most widely known and studied are PFOA and PFOS. They are considered “forever chemicals” because they do not break down under natural environmental conditions.

PFAS have been used in consumer product manufacturing since the 1950’s. They are used for their non-stick and water-resistant properties. You can find them in fast food containers/wrappers, microwave popcorn bags, carpet, and nonstick cookware.

PFAS and Health

PFAS is estimated to be present in the blood of almost all residents of the United States. Studies have shown that exposure to certain levels of PFAS may lead to:

- Reproductive effects such as decreased fertility or increased high blood pressure in pregnant women.
- Developmental effects or delays in children, including low birth weight, accelerated puberty, bone variations, or behavioral changes.
- Increased risk of some cancers, including prostate, kidney, and testicular cancers.
- Reduced ability of the body’s immune system to fight infections.
- Increased cholesterol levels and/or risk of obesity.

PFAS in the Eastern Panhandle

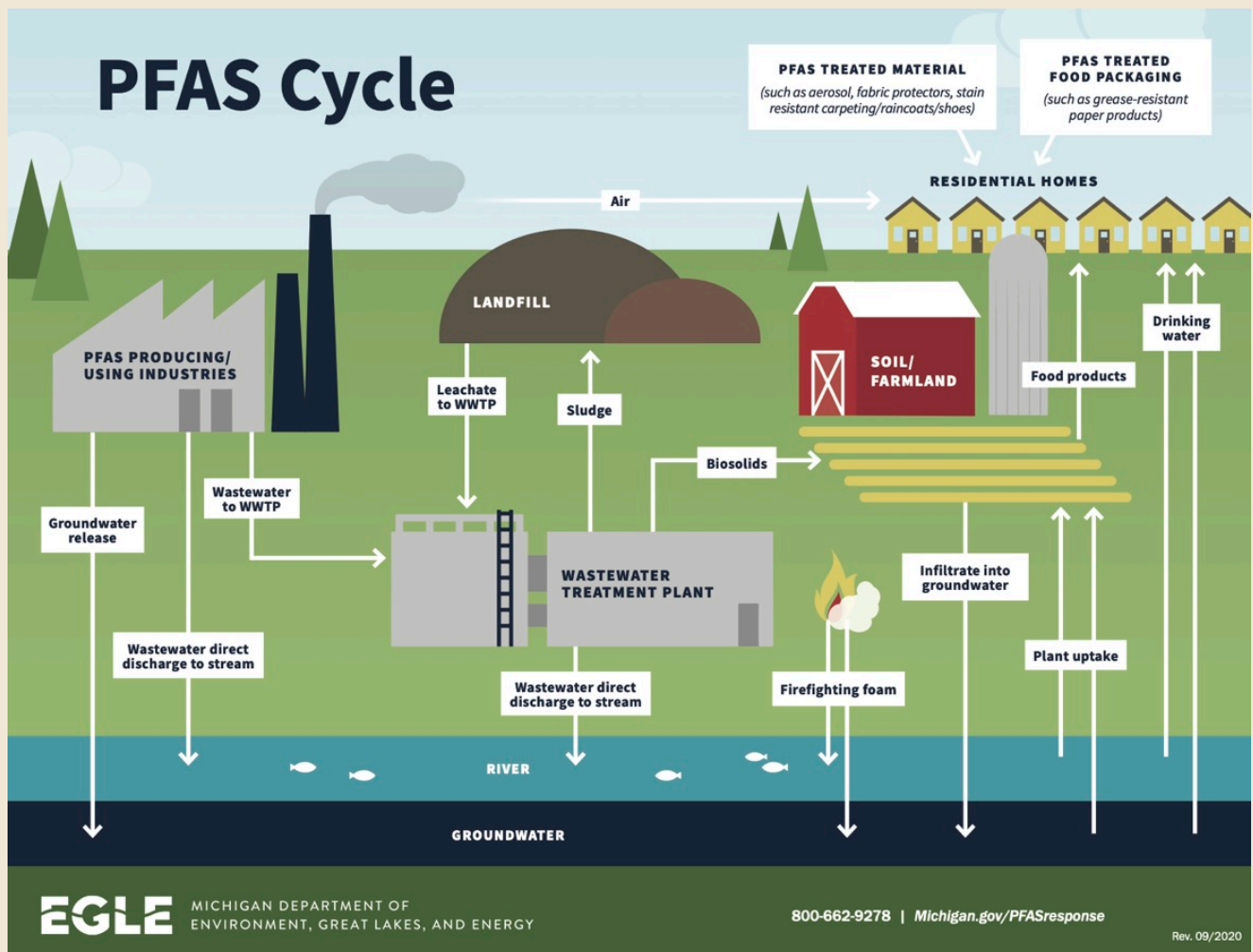
PFAS has been detected and measured in samples of public drinking water in Berkeley, Jefferson, and Morgan Counties. Check out this interactive map to learn about data and potential sources of PFAS, including, but not limited to, airports, wastewater treatment plans, landfills, fire stations, and military bases: <https://tinyurl.com/EP-PFAS>.



PFAS Sources and How We're Exposed

PFAS are used to create a wide range of waterproof, stain-resistant, and non-stick products. Many of these products are considered essential to modern life, public safety, and health. Consumption of contaminated drinking water, food, inhalation of indoor dust, and consumer products are the primary PFAS exposure pathways for the general population. PFAS are used in nearly every industry and enter the environment through several mechanisms, including:

- Release from manufacturing or production facilities that produce or use PFAS;
- Landfill discharge into the air, surface water, or groundwater;
- Wastewater discharge into waterways;
- Biosolids application to farmlands;
- Firefighting applications that require use of aqueous film forming foams (AFFF).





What Can I Do?

There are many ways you can get involved to help keep your family and communities protected from PFAS. WVDEP, WV Rivers Coalition, Fair Shake Environmental Legal Services, and many others are here to help!

Want to lower environmental exposures?

1. Join the next PFAS community meeting!
2. See what I have in my house that has PFAS in it.
3. Try to change my buying habits to buy less products that have PFAS in them.

Resource:

- ✓ PFAS Free Buying Guide, <https://tinyurl.com/PFAS-Buying-Guide>

4. Get a filter for my drinking water.

Resources:

- ✓ EPA Drinking Water Treatment Technologies, <https://tinyurl.com/Reduce-PFAS-Water>
- ✓ EWG Guide to PFAS Water Filters, <https://tinyurl.com/PFAS-Home-Filters>

5. Talk with my doctor about PFAS related testing or treatment.

Resources:

- ✓ ATSDR Talking to Your Healthcare Provider, <https://tinyurl.com/PFAS-Talk-With-Doctor>
- ✓ ATSDR PFAS Blood Level Estimation Tool, <https://tinyurl.com/PFAS-Blood-Test>
- ✓ ATSDR PFAS Information for Clinicians, <https://tinyurl.com/PFAS-For-Docs>

6. Talk with my friends, family, neighbors, and community about PFAS.

Resources:

- ✓ Sharing Your Story, <https://tinyurl.com/Talking-PFAS>

Want to prevent future releases?

1. Attend local meetings for your municipality, county, and water systems to understand more about your local water and share your PFAS questions and ideas during public commenting opportunities.
2. Engage in local and state permitting processes.

Resources:

- ✓ WVDEP Public Notice and Comment, <https://tinyurl.com/WVDEP-Public-Notice>
- ✓ WVDEP Citizens Guide, <https://tinyurl.com/WVDEP-Citizens-Guide>

3. Participate in the federal regulatory process as EPA and other federal agencies propose actions to limit PFAS use, prevent contamination, and clean it up once it occurs.

Resource:

- ✓ EPA Steps You Can Take to Reduce Your Risk, <https://tinyurl.com/PFAS-Reduce-Your-Risk>





Want to clean up historic releases?

1. Join or start a local watershed group to organize trash clean-ups; use citizen science to understand water quality; work with local, state, and federal government to make sure environmental laws are enforced; and organize events and trips so your neighbors can learn about and enjoy their waterway.

Resource:

- ✓ WVDEP Watershed Groups, <https://tinyurl.com/WV-Watershed-Groups>
2. Learn more about how WV state agencies and how they work to keep water safe:
 - A. West Virginia Water Development Authority, which serves as a revenue bond bank that provides financing for construction of wastewater and water facilities to Local Governmental Agencies (LGAs--municipalities, public service districts and other political subdivisions). Visit <http://www.wwwda.org>.
 - B. WV Department of Environmental Protection, Division of Land Restoration works to reclaim and remediate contaminated and disturbed land to a condition protective of public health and safety and suitable for productive reuse and economic development. Visit <https://dep.wv.gov/dlr/Pages/default.aspx>.
 - C. WV Department of Environmental Protection, Division of Water and Waste Management oversees some state permitting, Clean Water and Drinking Water Revolving funds, groundwater protection efforts, and other important water quality programs. Visit https://dep.wv.gov/WWE/Programs/Pages/water_programs.aspx.

The PFAS Protection Act

The PFAS Protection Act helps hold polluters responsible for cleaning up PFAS by:

- ✓ Requiring the Department of Environmental Protection to develop action plans to identify and address the sources of PFAS in raw water.
- ✓ Requiring industry to report and monitor PFAS discharges.
- ✓ Adopting state water quality criteria for any PFAS which EPA establishes final water criteria under the Clean Water Act.

The West Virginia Department of Environmental Protection is creating PFAS Action Plans for public drinking water systems affected by PFAS contamination. To learn more and get involved, visit WVRivers.org/PFAS.

