

PFAS IN ALABAMA UPDATED AS OF JULY 2022

What are PFAS?

Per- and polyfluoroalkyl substances (PFAS) are a group of man-made chemicals that includes PFOA, PFOS, FBSA, FBSEE, and thousands of other chemicals. These chemicals have been in use since the early 1940s, and are (or have been) found in many consumer products like cookware, food packaging, and stain repellants. PFOA and PFOS are the most studied PFAS and have been voluntarily phased out by industry, though they are still persistent in the environment. There are many other PFAS, including FBSA, FBSEE, and PFBS in use throughout our economy. Additional information is on the EPA website: <https://www.epa.gov/pfas/>.

General

- EPA is the environmental authority for determining toxicity standards under the federal environmental statutes: including Clean Air Act, Resource Conservation and Recovery Act (RCRA), Safe Drinking Water Act (SCWA), and Clean Water Act (CWA).
- Under these environmental statutes, EPA has not classified PFAS as Hazardous Air Pollutants (HAP) or a Hazardous Substances; EPA has not established enforceable health based drinking water standard (called a maximum contaminant level or MCL) or water quality criteria/standards for water bodies (streams and rivers).
- Until EPA makes a determination on toxicity, regulating discharges of those substances is within the purview of EPA under Toxic Substances Control Act (TSCA). ADEM has no regulatory basis to set limits for the discharge of those substances.
- Under TSCA, the manufacturing of NEW PFAS may have restrictions imposed by EPA. EPA is the agency responsible for TSCA, which is not delegated to any state nor is TSCA information shared with the states.
- In February 2019, EPA published an action plan for PFAS, which speaks to their short and long term goals to expand toxicity information for PFAS and can be found at https://www.epa.gov/sites/production/files/2019-02/documents/pfas_action_plan_021319_508compliant_1.pdf.
 - EPA does not have an enforceable MCL for PFOA and PFOS. EPA initiated the process in 2019 to evaluate the need for a MCL for PFOA and PFOS. This process is expected to take a minimum of two years.
 - The plan includes an EPA long term goal (2021) of supporting the states in managing water quality, if adequate data are available, by developing ambient water quality criteria under 304(a) of the CWA.
- In October 2021, EPA released the [PFAS Strategic Roadmap](#) to set timelines for EPA actions regarding PFAS.
- In June of 2022, the U.S. Environmental Protection Agency (EPA) released four drinking water health advisories for per- and polyfluoroalkyl substances (PFAS) establishing new health advisories for GenX and PFBS and lowering the health advisories for PFOA and PFOS. These interim, updated drinking water health advisories are non-enforceable guidance values that provide a margin of protection from a continuous lifetime of continuous exposure to the emerging contaminants in drinking water.

Chemical	Lifetime Health Advisory Level/Value (parts per trillion or ppt)
PFOA (perfluorooctanoic acid)	0.0004 (Interim)
PFOS (perfluorooctane sulfonic acid)	0.02 (Interim)

PFBS (Perfluorobutane sulfonic acid and its potassium salt)	2,000 (Final)
“GenX” chemicals (Hexafluoropropylene oxide (HFPO) dimer acid and its ammonium salt)	10 (Final)

- Alabama has applied for funds to address PFAS and other emerging contaminants in drinking water, specifically in small or disadvantaged communities, that EPA has made available to states and territories in the amount of \$1 billion nationwide – the first of \$5 billion in Bipartisan Infrastructure Law grant funding.
- When EPA establishes water quality criteria, ADEM can then adopt water quality standards that can be used to set permit limits on discharges to a waterbody and to determine if a waterbody requires cleanup to protect human health and aquatic life.

ADEM's PFAS Related Activities

- All PFAS data collected by ADEM is made available, following a data quality review, on the ADEM website at <http://app.adem.alabama.gov/eFile/>.

Documents, including testing and monitoring results, are available in eFile by selecting one or more media areas, entering a facility or permit number (optional), and entering "PFC" for the file name.

- PFAS Minimization Plans have been required as permit conditions on identified sources of PFAS in the Tennessee River watershed. Permit conditions also require PFAS monitoring at these facilities.
- ADEM collects PFAS data from the Tennessee and Coosa River Basin creeks and streams. These data provide ADEM and other state/federal agencies with a data base to support a science-based decision making process for addressing surface water discharges of PFAS.
- The monitoring of groundwater has been conducted at various sites to identify areas where PFAS have the potential to impact groundwater resources. This data will be utilized to support any necessary corrective action measures and remediation plans.
- ADEM collects fish tissue samples, including sites in the Wheeler and Wilson reservoirs, for screening of bio-accumulative contaminants, such as PFAS. The Alabama Department of Public Health (ADPH) uses this to determine the potential risk to citizens who consume fish from those local waterways.
 - The geographic areas described in the ADPH fish consumption advisory guidelines are available on a map on the ADEM's website: <http://adem.alabama.gov/water-info/>.

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