

Farm Production and Conservation

Business Center | Farm Service Agency | Natural Resources Conservation Service | Risk Management Agency

Per-and Polyfluoroalkyl Substances (PFAS)

PFAS

Per-and polyfluoroalkyl substances (PFAS) are a class of chemical compounds that are highly resistant to degradation and easily bioaccumulate in the environment. They are found in a broad range of products ranging from food packaging, non-stick cookware, water-proofing sealants, and fire-fighting foams used at public and military airfields. There are thousands of chemical compounds in the PFAS family, but perfluorooctane sulfonic acid (PFOS) and perfluorooctanoic acid (PFOA) have been the most widely studied. The study of PFAS is ongoing, but lab and epidemiological studies have found possible human health risks to PFAS exposure.

In 2016, the U.S. Environmental Protection Agency (EPA) published a Lifetime Public Health Advisory (LHA) for PFOS and PFOA in drinking water at 70 parts per trillion (ppt). The EPA is currently evaluating new rules for PFAS under the Safe Drinking Water Act (SDWA) and potential designation as a hazardous substance under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

Department of Defense Notifications

As part of the 2021 National Defense Reauthorization Act (Section 335), Department of Defense (DoD) installations are required to notify **any agricultural operation** located within one mile downgradient of a military installation where PFAS has been detected in groundwater above advisory limits. These notifications include PFOS and PFOA at 70 ppt, individually or in combination, and Perfluorobutanesulfonic acid or PFBS (a related PFAS compound) at 40 parts per billion (ppb). Notifications are being sent even though DoD is still assessing the nature and extent of PFAS contamination at its installations. The notifications are to ensure transparency as DoD continues its PFAS assessments.

Frequently Asked Questions and Answers

If a producer receives a DoD Notice does that mean their farm or ranch water supply is contaminated?

No, it only means there is a *potential* that their groundwater is contaminated. There are many factors that influence if a particular property is impacted. These factors include the type and concentration of PFAS, climate, hydrogeology, geology, and environmental conditions. The only way to determine if a water supply is contaminated is to sample water from the well(s) on the property.

What is the health advisory for PFAS?

The EPA LHA for the most common PFAS compounds, PFOS and PFOA, is currently 70 ppt, individually or in combination. At or below this level, no adverse health effects are anticipated to occur. DoD has issued guidance to its installations for PFAS, including PFBS at 40 ppb, and some states have promulgated their own PFAS limits.

What if FSA becomes aware of a notice related to a property that is being considered for a farm loan?

The loan application and agency review process should proceed as normal. The Farm Service Agency (FSA) must conduct due diligence and complete an Environmental Risk Assessment (Form FSA-851) on real property being offered as basic or additional security and certain loan servicing actions per FSA guidance. Currently, there are no published Maximum Contaminant Levels (MCLs) under the SDWA and no PFAS compounds are listed as a hazardous substance under CERCLA. If identified, PFAS should be treated as a “non-scope” contaminant, like asbestos and mold, and documented on the Form FSA-851. If PFOS or PFOA contamination at the property exceeds the current LHA of 70 ppt, then the appraisal and market value should appropriately reflect the environmental condition of the property.

FAQs Continued...

What are the next steps in this process and will a producer's wells be sampled?

FSA, the Natural Resources Conservation Service (NRCS), and the Risk Management Agency (RMA) should continue delivering USDA services to producers as normal. DoD is in the process of assessing PFAS contamination at its installations and will determine if groundwater wells outside the installation require sampling as part of their assessment. Each assessment and the next steps in the process are specific to each DoD installation that provided the notification. The best source of information about the assessment is DoD's point of contact that was identified in the notification letter. The letter also provides websites where producers can get more general information about DoD's Environmental Program and PFAS in the environment. Your state regulatory agency may be another source of information about PFAS contamination at DoD installations.

Additional Resources

DoD webpage with information on PFAS

<https://www.defense.gov/Explore/Spotlight/pfas/>

EPA webpage providing general information on PFAS

<https://www.epa.gov/pfas/>

EPA Fact Sheet, PFOS and PFOA Drinking Water Health Advisories

https://www.epa.gov/sites/production/files/2016-06/documents/drinkingwaterhealthadvisories_pfoa_pfos_up_dated_5.31.16.pdf

Food and Drug Administration (FDA) webpage on PFAS

<https://www.fda.gov/food/chemicals/and-polyfluoroaklyl-substances-pfas/>

NRCS Science and Technology Webinar Portal

For webinars concerning PFAS in water and agricultural production, search for "PFAS".

www.conservationwebinars.net/previous-webinars

