

National Committee to Develop a Framework for Addressing the Impact of PFAS on Agricultural Land

By **Brian D. Gross**

December 18, 2024

Per- and polyfluoroalkyl substances (PFAS) are a large, complex group of synthetic chemicals that have been used in consumer products around the world since approximately the 1950s. Although there are more than 15,000 PFAS molecules, all PFAS have one thing in common—a carbon-fluorine bond. Because the carbon-fluorine bond is one of the strongest in organic chemistry, these chemicals do not degrade easily in the environment and have been found in soil and water used for agriculture. Determining whether conservation efforts on agricultural land will reduce or worsen PFAS contamination is difficult to discern at this time due to knowledge gaps in the prevalence, fate, transport and potential toxicity of PFAS on farms.

A committee selected by the National Academies of Sciences, Engineering and Medicine (National Academies) will develop a framework to guide the UD Department of Agriculture's Farm Production and Conservation (FPAC) programs, including the Environmental Quality Incentives Program, the Conservation Stewardship Program, the Conservation Reserve Program, and the Agricultural Conservation Easements Program, in responding to PFAS contamination of agricultural land.

In a consensus report, the committee is expected to define the extent of PFAS challenges in agriculture and the ability of various conservation programs, practices, and initiatives to address contamination and mitigation of farms. The report will also reportedly determine factors that FPAC programs should consider when evaluating the risks associated with various proposed actions to cause or exacerbate PFAS contamination on farms. The committee proposes to identify cost-effective and feasible options to aid in PFAS mitigation on farms, such as crop changes, land retirement, and changes to on-farm water infrastructure and plans to report on the research necessary to evaluate the effectiveness of these options. In addition, the committee will attempt to identify additional actions outside FPAC's scope that could mitigate or prevent PFAS contamination in farming systems, while identifying actions that may not be economically or technically feasible to implement on a larger scale. The committee's report is expected to pinpoint research gaps necessary to close in order to improve land management practices for preventing PFAS contamination. Ultimately, the committee aims to provide guidance for decision-making based on current and emerging knowledge of the effect and transport of PFAS in agricultural systems.

The hope is that this framework will help to create effective strategies to address PFAS contamination and protect agricultural land and water resources. It should, at least, support enhanced decision-making in land management.

MG+M Law Clerk Christina DeVincenzi is a contributing author of this article.