

GAO Highlights

Highlights of [GAO-24-106523](#), a report to congressional requesters

Why GAO Did This Study

PFAS are a large group of chemicals developed in the 1940s that can persist in the environment and cause adverse health effects. They are used in a wide range of products, such as carpet and some nonstick cookware. Studies show that most people in the U.S. have been exposed to PFAS, likely from contaminated water, food, or air.

In 2029, EPA will require certain public water systems to comply with maximum contaminant levels for specific PFAS in drinking water. But there are concerns about whether systems have sufficient information to implement treatment methods and safely manage the resulting waste.

GAO was asked to examine PFAS-related challenges for public water systems. This report examines how systems in selected states have (1) treated PFAS in drinking water and (2) managed the resulting PFAS-contaminated waste, and challenges the systems faced in doing so. GAO conducted a generalizable survey of systems with PFAS in six states and interviewed representatives from water associations and engineering firms, as well as state and federal officials.

What GAO Recommends

GAO is making four recommendations, including that EPA (1) establish a time frame for issuing additional resources to help systems communicate PFAS health risks to customers and (2) create a straightforward resource relevant to systems' disposal of PFAS-contaminated waste. EPA agreed with three recommendations and said the fourth could be addressed in the next iteration of EPA's disposal guidance.

View [GAO-24-106523](#). For more information, contact J. Alfredo Gómez at (202) 512-3841 or gomezj@gao.gov.

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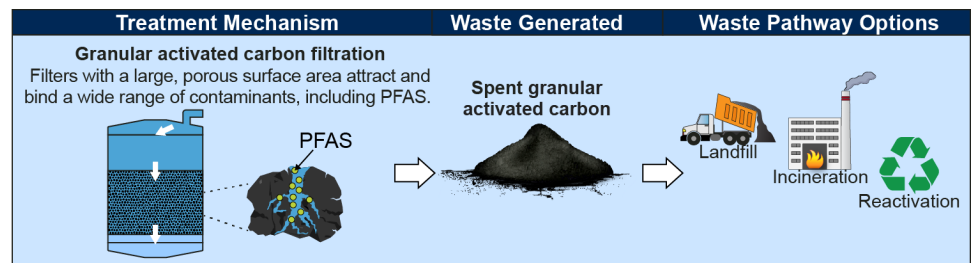
PERSISTENT CHEMICALS

Additional EPA Actions Could Help Public Water Systems Address PFAS in Drinking Water

What GAO Found

The Environmental Protection Agency (EPA) established maximum contaminant levels applicable to six types of per- and polyfluoroalkyl substances (PFAS) in drinking water. For perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS)—two of the most common PFAS—EPA set maximum contaminant levels at 4 parts per trillion. GAO surveyed public water systems in six selected states that had PFOA or PFOS at or above these levels. Most public water systems—an estimated 77 percent—have not yet fully implemented a PFAS treatment method, according to GAO's survey. Among the systems that have implemented treatment, granular activated carbon was used most often. This and other treatment methods generate PFAS-contaminated waste that must be safely managed (e.g., disposed of in a landfill, incinerated, or reactivated and reused).

Possible Waste Pathways for Granular Activated Carbon Contaminated with Per- and Polyfluoroalkyl Substances (PFAS)



Sources: GAO; GAO (icons); PikePicture/stock.adobe.com (spent granular activated carbon image). | GAO-24-106523

GAO found that public water systems face challenges as they implement PFAS treatment methods. For example, in the six selected states, an estimated 86 percent of large systems that were treating drinking water for PFAS found it challenging to communicate effectively with customers about PFAS health risks. Beginning in 2029, if there is a violation of a PFAS maximum contaminant level, systems will be required to notify the public about relevant health risks. EPA released a PFAS Communication Toolkit to help water systems communicate with the public, and officials said the agency plans to issue additional resources. However, according to agency officials, EPA has not established a time frame for issuing such resources. By promptly establishing a time frame, EPA can ensure these additional resources are available to systems in a timely manner.

In the six selected states, GAO estimates that 41 percent of public water systems treating for PFAS have managed the resulting PFAS-contaminated waste using various methods, such as disposal in landfills, incineration, and reactivation. Most systems—both those that have and have not begun managing waste—would find additional guidance on appropriate methods for managing waste helpful. Most systems were unfamiliar with EPA's 2020 PFAS destruction and disposal guidance and were confused about the regulatory requirements—or lack thereof—for PFAS disposal. EPA has developed multiple documents about these issues and updated its 2020 guidance in 2024. EPA could further address public water systems' confusion and desire for guidance by creating a straightforward resource for public water systems that summarizes existing regulations, policies, and guidance relevant to the disposal of PFAS-contaminated waste.