LANGAN

PFAS REGULATORY UPDATE

| APRIL 2024 |

US EPA UPDATED INTERIM GUIDANCE ON THE DESTRUCTION & DISPOSAL OF PFAS SUBSTANCES & MATERIALS - VERSION 2

OVERVIEW: US EPA has released an interim guidance with recommendations for destruction and disposal of PFAS wastes, along with a draft new analytical test method, OTM-50, that can address the potential for thermal treatment to release PFAS products of incomplete destruction into the environment.

On April 9, 2024, U.S. Environmental Protection Agency (US EPA) issued an update to its Interim Guidance on the Destruction and Disposal (D&D) of Perfluoroalkyl and Polyfluoroalkyl Substances (PFAS) and Materials Containing PFAS, originally issued in December 2020. In the updated guidance, US EPA encourages managers of PFAS and PFAS-containing materials to use D&D options that have a lower potential for releasing PFAS to the environment. The following technologies (in no particular order) meet this condition, as compared to other technologies:

- **Interim storage with controls:**
  - Short-term option for reducing PFAS release to the environment until D&D can be implemented
  - Appropriate for low-volume, containerized and/or high PFAS-content materials, with proper controls
  - Less suited for materials continuously generated or with high-volume/low-PFAS content
- **Permitted underground injection (Class I non-hazardous/hazardous waste injection wells):**
  - Isolates liquid wastes with high PFAS concentration deep in subsurface and can protect underground sources of drinking water
  - Limited suitability for many PFAS wastes, due to the low number of permitted injection wells and complicated transportation logistics/high cost
- **Landfill disposal at a permitted facility (Subtitle C hazardous waste landfills):**
  - Hazardous waste landfills are recommended, especially for concentrated wastes with high levels of PFAS
  - Hazardous waste landfills may not be suited for disposal of PFAS wastes that are biodegradable or volatile, since many do not have gas collection systems
  - Other types of landfills, like municipal solid waste facilities that have composite liners and leachate and gas collection are not recommended, except for stable polymeric PFAS wastes, until more research is completed to show migration of PFAS in the landfill leachate/gas to the environment is prevented
- **Thermal treatment combustors operating under certain conditions:**
  - PFAS destruction is maximized and products of incomplete destruction (PICs) are minimized with temperatures >1,100 C, proper feeding of liquid PFAS-containing materials, a well-mixed setting, and adequate residence time in the unit
  - Research and evaluation are needed to determine the potential for PFAS and PICs in air emissions, especially for the destruction of large quantities of PFAS wastes
  - US EPA has released a draft analytical test method, referred to as OTM-50, for further testing of PICs in air emissions during thermal treatment of PFAS wastes

The science and research of these fundamental D&D technologies continues to advance, but uncertainties remain. Additional performance and testing data is needed, including data on destruction and removal of PFAS in thermal treatment devices and long-term performance data for landfills and underground injection, to better support decision-making for PFAS waste management. To support this effort, US EPA has released a draft new analytical test method, OTM-50, that will allow collection of additional data to better understand releases during thermal treatment. OTM-50 is a draft method and will be updated as necessary when more data from stakeholders becomes available.

To discuss this matter and how it may impact your projects, please contact your Langan Project Manager or:

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