

Department of Energy (DOE) Guidance on Reporting Per- and Polyfluoroalkyl Substances (PFAS)-Containing Aqueous Film-Forming Foam (AFFF) Releases or Spills to the Environment

December 2021

Guidance: Beginning December 15, 2021, per- and polyfluoroalkyl substances (PFAS)-containing aqueous film-forming foam (AFFF) releases or spills to the environment must be reported using the new Reporting Criterion [Group 5, Subgroup A, (5)] in the Occurrence Reporting and Processing System (ORPS) Database. This document explains the reporting requirement and expectations and provides background information.

Requirement to Report: On September 16, 2021, David M. Turk, Deputy Secretary of Energy, issued a Memorandum for Heads of Departmental Elements entitled: “Addressing Per- and Polyfluoroalkyl Substances at the Department of Energy.” The memo states:

Effective immediately, sites will report any new PFAS-containing AFFF release or spills to DOE Headquarters. The Office of the Associate Under Secretary for Environment, Health and Safety (AU) will modify the Departmental Occurrence Reporting and Processing System (ORPS) to accept PFAS release entries, and AU will issue guidance on reporting PFAS releases to ORPS, within 90 days of this memorandum.

Department of Energy (DOE) Order 232.2A, *Occurrence Reporting and Processing of Operations Information*, will likely be updated to include this reporting requirement, with the timing and direction established by the PFAS Coordinating Committee and Directives Review Board.

Background: PFAS are a class of man-made chemicals comprised of thousands of chemical formulations that do not biodegrade or break down easily in the environment or human body. PFAS were first produced on an industrial scale for use in uranium separation activities during the Manhattan Project, and thousands of chemical formulations have since been developed. PFAS substances have been widely used due to their resistance to grease, water, oil and heat, and are often found in stain-resistant carpeting, water-resistant clothing, non-stick and grease-resistant food contact materials (e.g., cookware and food packaging), and firefighting foam. Certain PFAS substances are associated with adverse human health impacts.

While PFAS have been used in a wide range of industrial processes and commercial products, their primary known pathway to the environment has been through their presence in AFFFs, where the PFAS constituents serve as surfactants that help suppress fires comprised of flammable and combustible liquids (e.g., fuel fires). Congress has focused on the environmental and health impacts of the use of PFAS-containing AFFFs by the Department of Defense (DoD) in the National Defense Authorization Act each of the past several years.

DOE requirements to report PFAS-containing AFFF releases or spills aligns with actions taken by DoD and other federal agencies and will help minimize future liabilities and ongoing risks.

Reporting Expectations: All DOE sites must report PFAS-containing AFFF releases or spills to the environment in the ORPS Database under Reporting Criterion Group 5, Subgroup A, (5):

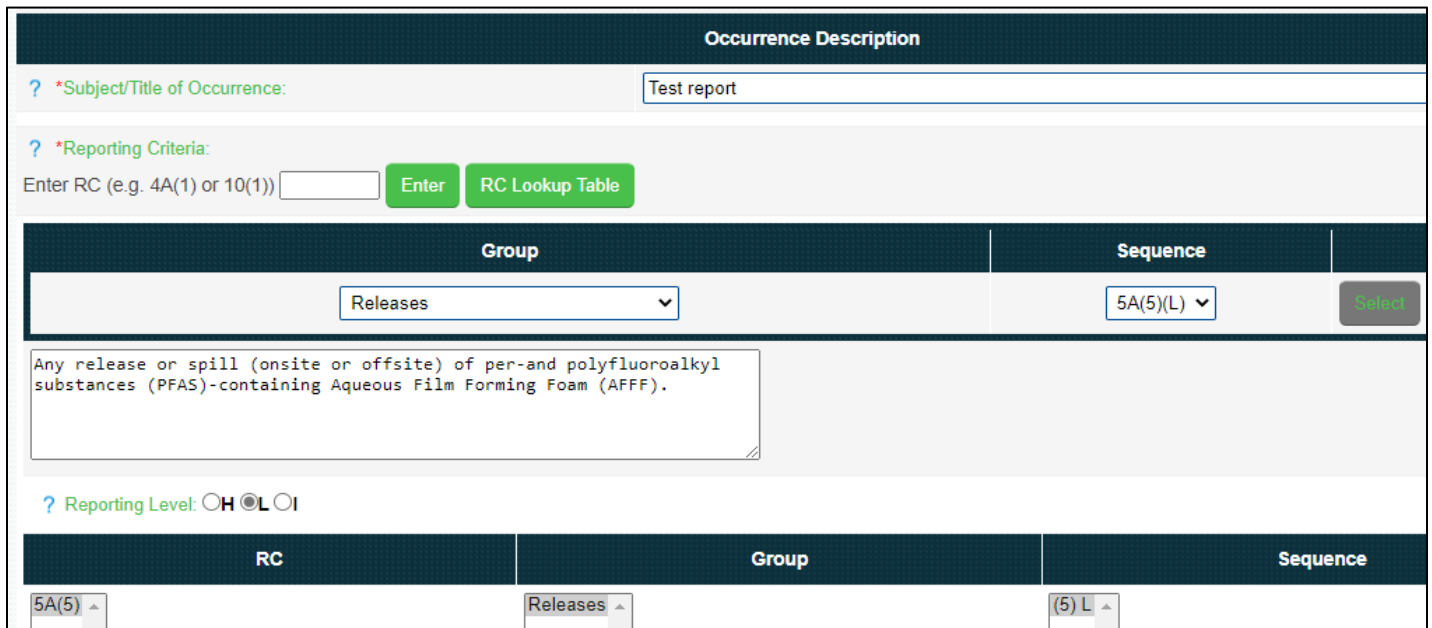
Group 5, Subgroup A, (5) (Low Level Report)
Any release or spill (onsite or offsite) of per-and polyfluoroalkyl substances (PFAS)-containing Aqueous Film Forming Foam (AFFF).

The Office of Environment Safety and Health (ES&H) Reporting and Analysis (AU-23) will implement and code ORPS reports accordingly using the new ORPS Database Headquarters (HQ) Keyword:

- 2H – PFAS Release or Spill

AU-23 recommends that DOE sites report any other release or spill of a known PFAS-containing substance that is not an AFFF as a Management Concern in ORPS.

ORPS Database Updates: The following screen captures (Figures 1-3) show the new Reporting Criterion and HQ Keyword addition in the ORPS Database.



The screenshot displays the 'Occurrence Description' form in the ORPS Database. At the top, the 'Subject/Title of Occurrence' field is populated with 'Test report'. Below this, the 'Reporting Criteria' section includes an input field for 'Enter RC (e.g. 4A(1) or 10(1))', an 'Enter' button, and an 'RC Lookup Table' button. A dropdown menu is set to 'Releases', and another dropdown menu is set to '5A(5)(L)'. A text area contains the description: 'Any release or spill (onsite or offsite) of per-and polyfluoroalkyl substances (PFAS)-containing Aqueous Film Forming Foam (AFFF)'. The 'Reporting Level' is indicated as 'L' (selected) among options H, L, and I. At the bottom, a table summarizes the selection:

RC	Group	Sequence
5A(5)	Releases	(5) L

Figure 1: Reporting Criterion 5A(5) when Submitting an ORPS Report

Figure 2: Searching for ORPS Reports under Reporting Criterion 5A(5)

Figure 3: ORPS Reports Keyworded with 2H- PFAS Release or Spill Are Searchable

For questions, please contact:

For PFAS Policy and Technical Assistance: Ashley Ruocco, Office of Sustainable Environmental Stewardship (AU-21), 301-903-7010, Ashley.Ruocco@hq.doe.gov.

For ORPS Database Questions: Ross Natoli, Office of ES&H Reporting and Analysis (AU-23), 301-903-6096, Ross.Natoli@hq.doe.gov.