



ACQUISITION
AND SUSTAINMENT

THE UNDER SECRETARY OF DEFENSE
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WASHINGTON, DC 20301-3010

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MEMORANDUM FOR UNDER SECRETARY OF DEFENSE FOR RESEARCH AND
ENGINEERING

ASSISTANT SECRETARY OF DEFENSE FOR SUSTAINMENT
ASSISTANT SECRETARY OF DEFENSE FOR ACQUISITION
ASSISTANT SECRETARY OF DEFENSE FOR ENERGY,
INSTALLATIONS, AND ENVIRONMENT
ASSISTANT SECRETARY OF DEFENSE FOR INDUSTRIAL BASE
POLICY
ASSISTANT SECRETARY OF DEFENSE FOR NUCLEAR,
CHEMICAL, AND BIOLOGICAL DEFENSE PROGRAMS

CLEARED
For Open Publication

Apr 27, 2026

Department of War

OFFICE OF PREPUBLICATION AND SECURITY REVIEW

Subject: Enterprise Wide Chemical and Material Risk Management for Capability Development
and Resilient Supply Chains

In alignment with the 2022 National Defense Strategy, the Department is focused on building a resilient joint force and defense ecosystem. To achieve this goal, the U.S. needs a resilient defense industrial base and a robust domestic chemical and material supply chain. The availability of mission critical chemicals and materials is vitally important. Mission critical chemicals and materials¹ are foundational to the military capabilities and readiness that give the Military Departments (MILDEPS) a competitive warfighting advantage. Emerging global supply chain challenges, complex geopolitical escalation dynamics, regulatory actions and other market forces complicate the ability for DoD and the Defense Industrial Base to reliably source mission critical chemicals and chemical containing products from domestic, allied, or non-adversarial foreign sources. DoD Components have identified mission critical chemicals in products procured for most, if not all, of the DoD strategic and conventional weapons systems, as well as a range of other applications necessary for DoD mission readiness.

Mission critical chemical availability, access, health, environmental and sourcing risks are enterprise-wide. These risks affect programs including sustainment; acquisition; research, development, test and evaluation (RDT&E); training and readiness; production, operations, maintenance and disposal of DoD assets; environment; and others as described in Department of Defense Instruction (DoDI) 4715.18. Comprehensive identification of the cross-cutting risks associated with mission critical chemicals and implementation of appropriate risk management actions is necessary to reduce the impacts to mission, readiness and budget. More specifically, risk of chemical unavailability due to a myriad of factors outside the direct control of DoD can result in serious consequences to mission readiness, including compromised weapon system performance, maintenance and repair activities, significant RDT&E costs for developing

¹ Mission critical chemicals include, but are not limited to, those on the DoD Emerging Chemicals Action List and Watch List, Industrial Base Policy's list of Critical Chemicals, and associated materials on the Defense Logistics Agency's list of Strategic Materials.

alternative chemicals that meet DoD performance standards within a compressed time frame, and costs for stockpiling mission critical chemicals or reducing dependence on foreign sources.

Managing chemical risks, maintaining chemical and material availability, planning for obsolescence, and transitioning to alternative chemicals and products whenever possible, is the responsibility of every organization within the DoD enterprise. Attachment 1 contains a representative list of DoD issuances that identifies multiple DoD organizations with responsibilities in managing chemical risks. Most of these issuances include requirements that apply to DoD Components or mandate the development of Component-implementing guidance. This memorandum underscores the key, collaborative responsibilities distributed throughout those issuances for the Office of the Secretary of Defense (OSD), the MILDEPS, and DoD Components to comprehensively manage increasing mission critical chemical risk.

The DoDI 4715.18 provides one of several DoD mechanisms to address the market and regulatory impacts from mission critical chemicals. It establishes policy, assigns responsibilities, and provides procedures for an enterprise-wide approach to the identification, impact assessment, and management of mission critical emerging chemicals (ECs).² As such, the Office of the Under Secretary of Defense, Acquisition and Sustainment ECs Program staff³ identifies chemicals that qualify as mission critical chemicals, assesses the DoD enterprise for the likelihood and severity of impacts associated with mission critical chemicals, and identifies and communicates risk management actions (RMAs) and policies to DoD Components and MILDEPS. Attachment 2 provides a current list of in-progress RMAs assigned to the OSD Components and MILDEPS for their action.

Although DoDI 4715.18 assigns responsibility to DoD Components and MILDEPS to further characterize risks associated with ECs and their mission criticality and implement risk management actions, it requires significant DoD-wide implementation to be effective. While DoDI 4715.18 establishes the baseline process for identifying mission critical chemical risks and concerns, organizations across the DoD enterprise, from requirements to acquisition to sustainment, must take action to monitor their chemical supply chains and further mitigate chemical risks across all capability solutions. To enhance chemical supply chain supportability and reduce supply chain and Diminishing Manufacturing Sources and Material Shortages risk across the Joint Force, I am directing the following actions:

- The Under Secretary of Defense for Acquisition and Sustainment (USD(A&S)) will chair the Emerging Chemicals Governance Council (ECGC) to oversee policy that addresses risks associated with mission critical chemicals. The USD(A&S) requests the Under Secretary of Defense for Research and Engineering to serve as the permanent co-chair of the ECGC. The Under Secretary of Defense for Personnel and

² Per DoDI 4715.18, ECs are chemicals relevant to the DoD that are characterized by a perceived or real threat to human health or the environment and that have new or changing toxicity values or new or changing human health or environmental regulatory standards.

³ Per DoDI 4715.18, EC Program staff are action officers within the Office of the DASD(EMR) who are responsible for the EC process.

Readiness will continue to participate as member of the ECGC and oversee or delegate as needed at Assistant Secretary of Defense level membership established by DoDI 4715.18. Offices with lead or supporting roles have distinct equities and responsibilities in addressing mission critical chemicals.

- The Assistant Secretary of Defense for Energy Installations and Environment (ASD(EI&E)) will identify, assess, and manage chemical risks to infrastructure, real property, and installations; operational and installation energy resilience; environmental cleanup, environmental compliance, and property transfer; and warfighter and community health and safety. The ASD(EI&E) will coordinate with Federal and State authorities on legislation and regulation regarding chemical hazards, exposures, conditions of use, and criticality of use. In accordance with ECGC direction, the ASD(EI&E) will update relevant DoDIs to include appropriate tasking to MILDEPS to effectively implement policy and actions to reduce mission critical chemical risks across their enterprises.
- The Assistant Secretary of Defense for Acquisition (ASD(A)) will identify, assess, and manage program risk related to material availability, qualification, and development. In accordance with ECGC direction, the ASD(A) will issue and implement policies as required and exercise oversight to reduce mission critical chemical risks across their enterprise.
- The Assistant Secretary of Defense for Industrial Base Policy (ASD(IBP)) will anticipate and close gaps in manufacturing capabilities for defense systems, assess impacts related to mergers acquisitions, and divestitures, and execute authorities under U.S.C., Title 10, Sections 4811, 4816, and the Defense Production Act of 1950. This includes creating, protecting, or expanding domestic chemical manufacturing capabilities and utilizing the Department of Commerce authority to obtain information for performing industry assessments of the U.S. chemical industrial base capabilities. In accordance with ECGC direction, the ASD(IBP) will update relevant industrial base policy strategies and DoDIs to include appropriate tasking to MILDEPS to effectively implement policy and actions to reduce mission critical chemical risks across their enterprise.
- The Assistant Secretary of Defense for Sustainment (ASD(S)) will create policies and procedures associated with identifying, assessing, and managing risk, and with chemical and material supply, storage and distribution, transport, and maintenance of major weapon systems and equipment. ASD(S) will provide oversight of life cycle logistics to ensure chemical and material sustainability and supportability early in the acquisition process. The Defense Logistics Agency will support activities to ensure more robust chemical and material content disclosure and supply chain transparency, manage end-to-end defense chemical supply chain, and stockpiling of critical chemicals and materials. In accordance with ECGC direction, the ASD(S) will

update relevant DoDIs to include appropriate tasking to MILDEPS to effectively implement policy and actions to reduce mission critical chemical risks across their enterprise.

- The Assistant Secretary of Defense for Nuclear, Chemical, and Biological Defense Programs (ASD(NCB)) will identify and manage chemical risk to sustaining the U.S. nuclear deterrent, weapons of mass destruction threats, and ensuring compliance with nuclear, chemical, and biological treaties and agreements. The Defense Threat Reduction Agency will provide technical subject matter expertise to mission critical chemical risk management related to Chemical, Biological, Radiological, and Nuclear threats. In accordance with ECGC direction, the ASD(NCB) will update relevant DoDIs to include appropriate tasking to MILDEPS to effectively implement policy and actions that reduce mission critical chemical risks across their enterprise.

The responsible Components will implement these actions, continue to participate in the ECGC, and prioritize resources to support these initiatives. These initiatives are critical to aligning the Department's capabilities with the National Defense Strategy and ensuring joint competitive advantage in the current and future warfighting environment. I appreciate your support.



William A. LaPlante

Attachments:

1. List of DoD issuances that support chemical risk management
2. List of in-progress RMAs

cc:

USD(P&R)

General Counsel