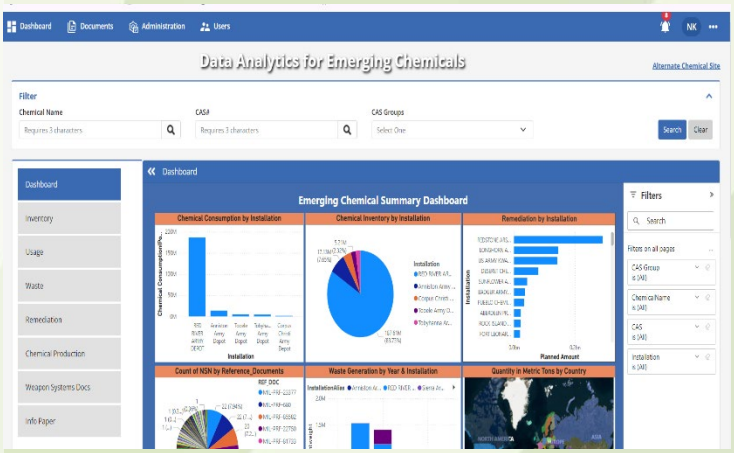
National Defense Center for Energy and Environment

DEFENSE ANALYTICS FOR EMERGING CHEMICAL TOOL (DAEC)

PROJECT OVERVIEW

The overall system goal is to assist DoD entities to quickly identify readiness and/or mission risk related to emerging chemical restrictions or bans or supply chain issues. System will identify where Emerging Chemicals (ECs) are stored and used in support of weapon systems. Additionally, the system will flag upcoming risks related to EPA and/or OSHA chemical bans or potential manufacturing/logistics supply issues. This is a proof-of-concept project that will use the UH-60 Black Hawk helicopter and the Navy P-8 Poseidon platforms to determine system feasibility and current limitations.



DAEC view: Allows identification of potential risks to mission, readiness, and supply chain.

BENEFITS

Predictive tool that will identify mission, readiness, environmental, and safety risks related to emerging chemicals, as well as identify known chemicals & locations on weapon systems using tech data, drawings, Fed Log, bills of materials, specs, usage records, etc. The application will assist with identifying supply chain risks, identifying US and Foreign potential regulatory risks (EPA, OSHA, REACH), reducing soldier/maintainer health and safety risks by informing DoD/ Agency of EC risks and potential exposure risks, and will identify data gaps (e.g., where Agencies should start collecting similar data & need for common DoD terms) that can improve quality and accessibility of DoD decisional data.

PATH FORWARD

The DAEC tool has demonstrated its potential to help DoD entities quickly identify mission and supply chain risks from emerging chemical restrictions. In Phases 1 and 2, the system has shown success tracking ECs in systems like the Army UH-60 Black Hawk and Navy P-8 Poseidon. While the proof-of-concept has shown the application tool's feasibility, moving forward, a transition partner is critical, such as the Defense Logistics Agency (DLA), AMCOM, and DCS-G9, to fully operationalize the tool and expand its capabilities.

DoD Executive Agent

Office of the Assistant Secretary of the Army for Installations, Energy, and Environment

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FOR FURTHER INFORMATION

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