



TSCA Panel: Assessing the impacts of Amended Toxic Substances Control Act (TSCA) to the DoD Mission and the Defense Industrial Base.

Sustainable Hazardous Material Management:

- ***Manage/minimize risks & identify safer alternatives to toxic chemicals while ensuring performance to meet mission requirements***
 - *Protect Human Health and the environment*
 - *Reduce costs of regulation; hazardous waste storage and disposal, worker protection, and future liabilities*
 - *Stimulate innovation – research and development on chemicals of importance to DoD mission.*

■ ***Risk Evaluation for Existing Chemicals under Amended TSCA***

- Purpose: “Determine whether a chemical substance presents an **unreasonable** risk to health or the environment under the **conditions of use** (of the chemical substance)”

■ ***“Conditions of Use”***

- Means the circumstances under which a chemical substance is intended, known or reasonably foreseen to be manufactured, processed, distributed in commerce, **used, or disposed of.**
- Intended to avoid past practices of assessing only narrow uses of a chemical substance but towards a more inclusive approach to chemical substance management
- Intent is not on individual uses (to prioritize chemicals) but on substances that present a potential hazard and potential route to exposure under the “conditions of use”.

■ ***End User Considerations:***

- **Uses/Disposal – Applications/Performance; Management/Controls; Alternatives/Transitions(Implementation)/Resourcing.**
 - Hazardous Chemicals are widely used in connection with all phases of the System Acquisition process.
 - System/Performance-Driven Requirements for use:
 - Contained in technical manuals, specifications, etc., that govern the processes and procedures for weapon systems operations and support.
- **Conditions Affecting Replacement or Elimination**
 - Commercial availability of potential viable (equal to or improved performance) alternatives for specific applications.
 - Potential alternative(s) are less hazardous to personnel safety and environment under management and control processes and practices.
 - Cost/Resourcing impact analysis of potential alternative chemicals/processes.



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Process to identify items containing chemicals targeted by amended TSCA rules

- *Identify National Stock Numbers (NSNs) and associated applications in use which contain chemicals targeted by proposed TSCA rules.*
- *HMIRS -- Serves as the DoD SDS Repository as mandated by the DODI 6050.05*
 - *Data is maintained by each service data stewards for items that they manage or locally purchase*
 - *HMIRS recently (30 June) went through migration to HMIRS NextGEN*
 - *Contains SDS/PDS images and associated data*
 - *Provide unique serial number per stock number and product formulation (e.g. DVGBX)*
- *Navy builds full HMIRS records (logistics, SDS, and chemical data) in HMIRS for NSNs and only SDS and logistics for Local Stock Numbers (LSNs)*
- *Search HAZMAT Information Resource System (HMIRS) for products containing targeted chemicals in reportable quantities ($\geq 1\%$ or $\geq 0.1\%$ for carcinogens).*
- *Using NSNs, determine Navy procurement, Systems HAZMAT Lists status, and technical requirements.*
- *Calculate concentration of each targeted chemical in each NSN using percentages specified on the Safety Data Sheet (SDS).*
- *Identify technical POCs for applications. Identify prior substitution details.*
- *Contact technical POCs with recommended substitutes.*
- *If substitute is accepted, update technical documentation.*
- *If substitute is not accepted, document reason.*



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Amended TSCA:

- Shifts the burden of demonstrating chemical safety — all chemicals, old and new — to chemical manufacturers, processors and manufacturers of the finished goods -- ***engage industry suppliers.***
- Mandates that the EPA prioritize and evaluate “high priority” chemicals according to an aggressive and judicially enforceable schedule -- ***plan/streamline the internal review processes of chemical substances.***
- Mandates EPA’s review and evaluation of these chemicals, and many others determined to be “high priority” which will have significant impacts on the chemicals reviewed, their uses and applications and availability -- ***engage specifiers and systems engineering.***
- With change comes opportunity e.g. new sustainable products & technologies -- ***encourage innovation*** in more sustainable and less environmentally impactful chemistries/formulations.