Assessing the Impacts of TSCA Reform: A DoD Enterprise Wide Approach

Acquisition, Technology and Logistics

National Defense Industrial Association 20th Annual Systems Engineering Conference Panel Discussion



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TSCA Session Panelists



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Platform Discussion Objectives



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Provide overview of DoD - EPA engagement and the opportunities for providing useful information to EPA for consideration during risk evaluation and draft rule making.

Present the process for identifying DoD conditions of use and criticality of use for the initial 15 TSCA chemicals.

Present the outcome of a pilot industrial base assessment that considered suppliers, availability of potential chemical substitutes, and projects the associated industrial base impact of methylene chloride and *N*-methylpyrrolidone.

Discuss the market impacts should national security exemptions be incorporated into rule makings for specific chemicals and the conditions that may lead to the formation of DoD-specific niche markets.

Explore additional approaches and strategies to mitigate impacts to DoD.

Impacts of TSCA Reform: Some Key Questions



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How can TSCA reform impact the DoD Mission?

Does TSCA apply to Federal agencies?

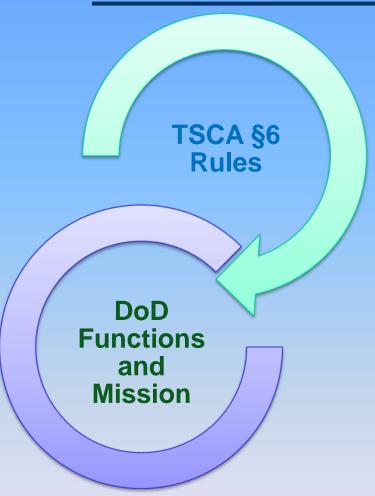
Would a National Security Exemption help reduce supply chain and mission risks?

How will the Defense Industrial Base be impacted?

And how will that impact affect the DoD Mission?

Impacts to DoD from TSCA §6 Rulemaking Acquisition, Technology and Logistics

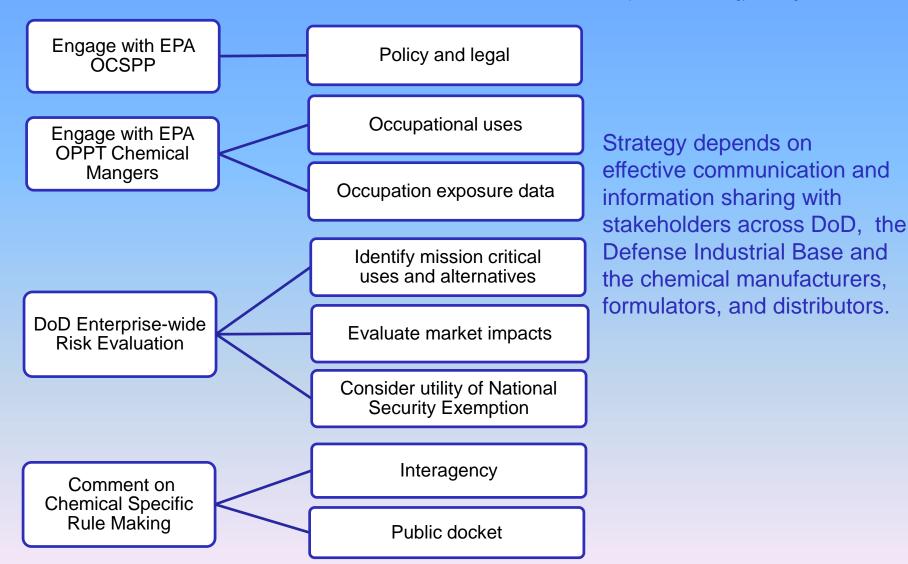




- EPA can apply one or more of the following risk management actions
 - Ban on manufacturing, processing, distribution and commercial uses of the chemical
 - Restriction of specific chemical uses
 - Regulation of disposal methods
 - Labeling requirements
 - Recordkeeping requirements
 - Notification requirements
- EPA risk management actions can impact a number of DoD functional areas
 - Adversely impact mission critical functions associated with acquisition & logistics
 - Increased workload
 - Reviewing safety/risk assessments
 - **Determining DoD functions/systems** affected
 - Assessing availability of substitute chemicals and whether they can meet DoD performance specifications

DoD Approach for Assessing and Mitigating Potential Mission Risks





Ongoing TSCA §6(a) Rulemaking



- Section 6(a) Work Plan Chemicals with Completed Risk Assessments
 - EPA Assessments for TCE, MC and NMP demonstrated significant risks to workers
 - Trichloroethylene (TCE)
 - Proposed rule to ban TCE use in commercial and consumer aerosol degreasing and as a spot cleaner in dry cleaning (December 2016)
 - Proposed rule to ban TCE use in commercial vapor degreasing (January 2017)
 - Methylene chloride (MC) and N-methylpyrrolidone (NMP)
 - Proposed rule to regulate MC and NMP in paint and coating removal (includes National Security Exemption) (January 2017)
 - OMB interagency review of draft rules Sept-Nov 2016
 - OSD coordinated review and comment on TCE in aerosol degreasing/spot cleaning and on MC and NMP in paint removers

DoD Uses

Aerospace products

Hexavalent chromium free aircraft conversion coatings

Aircraft parts requiring nondestructive inspection

Bonding, primers, sealants, and adhesives

Removal of coatings from corrosion sensitive components

National Security Exemptions



- Draft Rule on Methylene Chloride and NMP
 - Rulemaking proposes ban on all uses associated with paint and coating removal
 - Proposes National Security Exemption (NSE) for specific uses in Army,
 Navy and Air Force aviation and Navy ship maintenance applications
 - Use of currently available substitute chemicals or methods may lead to shortened service life for critical components (some of which are no longer manufactured), reduced availability and mission readiness of military aircraft and vessels, and an increased risk of catastrophic failure of safety critical parts
 - Time-limited exemption 10 years with the potential for extension
 - DoD comments submitted to OMB and EPA
 - Selection of risk management options other than a ban
 - Separation of consumer versus industrial exposure risk including a recognition of existing industrial safety practices
 - Potential conflicts from multiple agencies implementing and enforcing occupational workplace exposure standards and controls

Defense Industrial Base Assessment



- DUSD ESOH CMRMP collaboration with Defense Contract Management Agency Industrial Analysis Center
- Identify industrial base suppliers including single, foreign and potential alternative suppliers
- Evaluate market impact of regulating MC and NMP for all conditions of use (supplier viability, price and chemical availability)
 - Fragility: A company's financial health and competitive environment within a sector
 - Financial outlook of company
 - Dependence on DoD sales
 - Number and type of firms in sector
 - Foreign dependency
 - Criticality: Importance of product to the DoD
 - Defense uniqueness
 - Skilled labor requirements for manufacturing product
 - Unique facility and equipment requirements
 - Available alternatives, including products and technologies
 - Leverage information and DCMA Financial Capability Group to assess potential effects of fluctuations in future demand and price on supplier viability
 - Evaluate potential for niche market to form due to national security exemption

Current TSCA §6(b) Rulemaking



- Section 6(b) First 10 Chemicals for Risk Evaluation
 - Within 6 months, EPA must identify and publish a list of the first 10 chemicals for risk evaluation
 - List must be drawn from the 2014 update to the TSCA
 Work Plan
 - Publication triggers statutory deadlines
 - List of first ten chemicals published (November 29, 2016)
 - Scoping of risk evaluation within 6 months (June 2017)
 - Risk evaluation (3 to 3½ years)
 - Risk management rule identified "unreasonable risk" (2-4 years following risk evaluation)

Current TSCA §6(h) Rulemaking



- Section 6(h) Persistent, Bioaccumulative and Toxic Chemicals (PBTs)
 - Section 6(h) requires EPA to take expedited risk management action on certain PBT chemicals listed on the TSCA Work Plan
 - EPA must propose rules to reduce exposure to the extent practicable within 3 years (June 22, 2019) and finalized 18 months later
 - No risk evaluation required, only use and exposure assessment
 - Manufacturers could request full risk evaluation by September 19, 2016 in lieu of expedited action

TSCA High-Priority and Persistent, Bioaccumulative and Toxic (PBT) Chemicals



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CASRN	Chemical	TSCA	DoD Use
123-91-1	1,4-Dioxane	High Priority: List of 10	Y
106-94-5	1-Bromopropane	High Priority: List of 10	Y
1332-21-4	Asbestos	High Priority: List of 10	
56-23-5	Carbon Tetrachloride	High Priority: List of 10	Y
3194-55-6 25637-99-4	Cyclic Aliphatic Bromide Cluster (HBCD)	High Priority: List of 10	
75-09-2	Methylene Chloride (MC)	High Priority: List of 10	Υ
872-50-4	N-methylpyrrolidone (NMP)	High Priority: List of 10	Y
81-33-4	Pigment Violet 29	High Priority: List of 10	
79-01-6	Trichloroethylene (TCE)	High Priority: List of 10	Y
127-18-4	Tetrachloroethylene (PCE)	High Priority: List of 10	Y
1163-19-5	Decabromodiphenyl ethers (DecaBDE)	PBT: List of 5	
87-68-3	Hexachlorobutadiene (HCBD)	PBT: List of 5	Y
133-49-3	Pentachlorothio-phenol (PCTP)	PBT: List of 5	
68937-41-7	Tris (4-isopropylphenyl) phosphate	PBT: List of 5	Y
732-26-3	2,4,6-Tris(tert-butyl)phenol	PBT: List of 5	

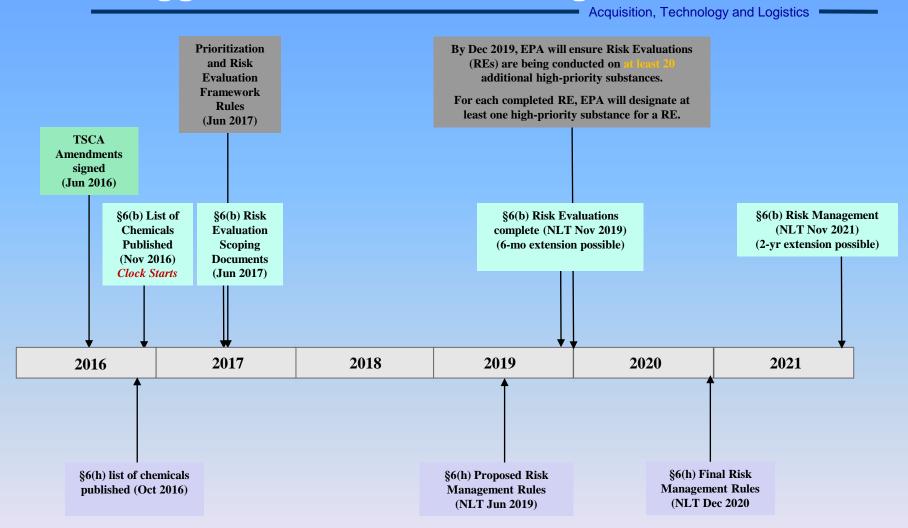
EPA Next Steps:

List of 10: EPA published risk evaluation scoping document in June 2017 to include the hazard(s), exposure(s), conditions of use, and the potentially exposed or susceptible subpopulation(s) the Agency plans to consider for the evaluation.

List of 5: EPA to propose expedited action not later than June 22, 2019.

TSCA Reform Statutory Requirements Drive Aggressive and Unrelenting Timeline





Questions regarding how TSCA will be implemented remain. However, the rapid advancement of rule making and the possibility for secondary and tertiary impacts to the DoD supply chain require DoD to support on-going engagement with EPA.

Panel Questions



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How can TSCA reform impact the DoD Mission?

How will TSCA result in increased supply chain and mission risks?

How can DoD better engage with the Defense Industrial Base to understand market impacts?

Are chemical manufacturers aware of the potential impacts to the defense industrial base and the DoD mission?