

Managing Chemicals, Materials and Impacts to Defense Supply Chains from 'REACH'

**European Union (EU) Registration, Evaluation,
Authorization and Restriction of Chemicals**

October 12, 2010

**13th Annual Chemical Management (CMS) Workshop:
Supply Chain Sustainability in Practice**

What is REACH?

- **EU Regulation enacted in June 2007**
 - Replaces some 40 pre-existing laws in the EU
 - Covers all of the EU
 - 30 countries, including some neighboring states
 - Registration of ~30,000 chemicals in 10 years
 - *“No data, No market”*
 - Far more sweeping than RoHS (Restriction of Hazardous Substances) which regulated 6 chemicals
- **REACH authorization required to use**
 - Substances of Very High Concern (SVHCs)
 - Very persistent, very bio-accumulative (vPvB)
 - Carcinogens, mutagens and reproductive toxins
 - Risks adequately controlled or benefits outweigh risks AND no alternatives exist
 - High volume chemicals

One Industry Cost Estimate for REACH

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If RoHS cost the industry
\$1 dollar...



Reach will
cost the industry \$12



**Law of Unintended Consequences:
The 'Lead in Electronics' Story**

REACH Bottom Line Up Front

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- **REACH was enacted to**
 - Provide better visibility and transparency of chemical exposure information to consumers
 - Decrease the use of toxic and hazardous chemicals in the EU
 - Shift the ‘Burden of Proof’ for the safety of materials to the manufacturer/supplier
 - Reduce future environmental and health damages due to chemical release and exposure
- **REACH registrations have skyrocketed from hundreds to thousands of chemicals within the past several months**
- **ECHA (European Chemicals Agency) expects to add 40 chemicals to list for bans under REACH in 2011**

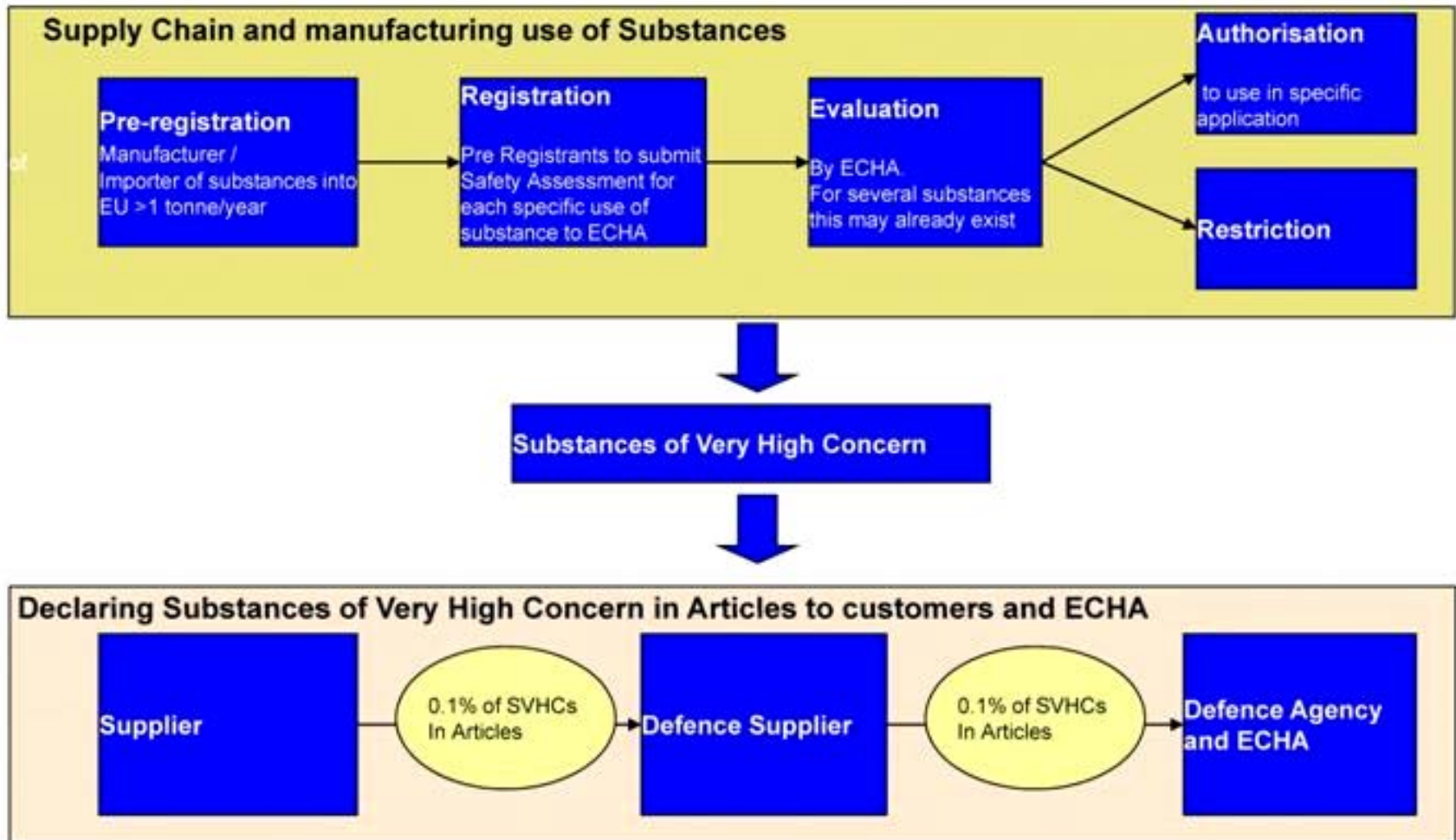
What About Defense Applications?

- **Military applications were not considered**
 - Yet there are very unique performance requirements for many defense materials
- **Different Ministries of Defense (MODs) have different opinions**
 - REACH applies to
 - No military applications
 - Some military applications
 - All military applications
- **No blanket military exemption from REACH**
 - Each Member State (MS) has the ability to issue narrow exemptions for military-unique products

One Legal View of REACH:

BAE Systems Land Systems Munitions

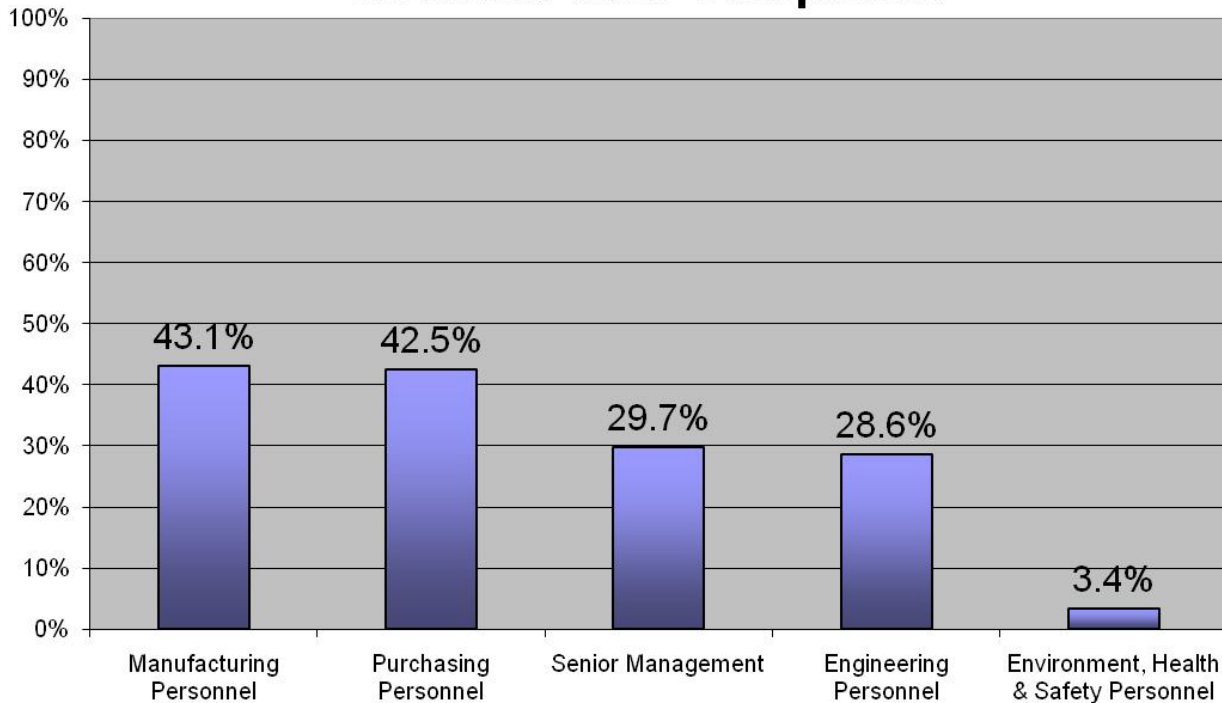
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Defense Supply Chain Comprehension

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Percent of Personnel at Companies Supplying the U.S. Military with **No** understanding of the REACH Regulation as it Affects their Companies



IPC Market Research Study – July 10, 2008

Verifies the need for more involvement by US companies in trade associations, etc., and SIEFS – Substance Information Exchange Forums – Voluntary industry bodies created concerning specific chemicals to help gather and disseminate information.

Expected Outcomes of REACH

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- Limiting **some chemical availability**
 - Decreased material availability & increased costs for **certain chemicals/articles**
 - Undisclosed substitution of **chemicals in Commercial-Off-the-Shelf (COTS) Products**
 - Accelerating the need to test and evaluate substitute materials
 - Increased equipment costs **passed on to foreign customers when substitute materials are available to satisfy individual country requirements**
 - Accidental release of confidential information
 - Different interpretations of REACH **by each of the EU participating states.**
- Possible negative affects on US military operations and maintenance in the EU
 - Disruption to defense supply chains outside the EU due to the global nature of supply
 - Failure or marginal performance of weapon systems or components of weapon systems
 - Increased DoD research and development costs
 - Increased equipment costs eventually passed on to DoD / disruption on US market
 - Inadvertent violation of the US International Traffic in Arms Regulations (ITAR)
 - Confusion for European Command and NATO interoperability

DoD Prepares for REACH

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- **Strategic Plan for REACH mandated by the Office of the Under Secretary of Defense (OUSD) for Acquisition, Technology and Logistics (AT&L)**
- **Maintain military readiness by:**
 - Identifying the strategies and solutions **to minimize potentially significant negative impacts**
 - Apportioning responsibilities **to the appropriate DoD offices**
 - Providing a roadmap **to unify, coordinate and communicate these activities across the Department**
 - Reducing the toxic & hazardous chemicals use and risks wherever feasible
 - Outlining the resources needed

A 'Living Document' in need of periodic updates

DoD Drafting Team*

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- **Army, Navy/Marines, Air Force**
- **ODUSD for Installations and Environment (I&E)**
 - Business Enterprise Integration (BEI)
 - Environmental Readiness, Safety (ERS)
 - Chemical and Material Risk Management (CMRM)
- **Industrial Policy (IP)**
- **Strategic Environmental Research and Development Program and Environmental Security Technology Certification Program (SERDP/ESTCP)**
- **Supply Chain Integration (SCI)**
- **Defense Procurement Acquisition Policy (DPAP)**
- **Defense Security Cooperation Agency (DSCA)**
- **Defense Logistics Agency (DLA)**
- **Defense Standardization Program Office (DSPO)**
- **Joint Defense Manufacturing Technology Panel (JDMTP)**

* Reviewed by Office of the General Counsel (OGC).

Goals of DoD's REACH Strategic Plan

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1. Protecting the availability of substances with significant mission impact
2. **Ensuring the performance of substitutes**
3. **Guarding against disruptions to the supply chain**
4. Encouraging others to pursue defense exemptions
5. **Capitalizing on Environment, Safety and Health (EHS) improvements**
6. **Capitalizing on chemical management opportunities**
7. Assuring acquisition strategies
8. Planning for future regulations
9. Minimizing negative impacts to Foreign Military Sales (FMS)

FMS and REACH

- **Goal: Minimize REACH-driven negative impacts on FMS sales and support of equipment delivered under FMS contracts**
 - DSCA and DPAP have major roles
 - Objective 1: Seek to accommodate foreign customer requests for REACH-compliant defense articles on a customer-funded basis
 - Objective 2: Continue to review FMS cases with regard to ways in which they might be impacted by REACH

Tracking REACH Chemicals of Interest

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An Example

Substance	Risk	Information Compiled by CMRMD Scanning Process
Anthracene CAS ¹ No: 120-12-7 EC ² No: 204-371-1	PBT ³	Used in the manufacture of pyrotechnics and as a component of black smoke. May be of concern since it is used in dyes (flares and markers). HMIRS⁴ – 37 products MIDAS⁵ – 32 items

¹CAS = Chemical Abstracts Service

²EC = Term replaces outmoded European Inventory of Existing Commercial Substances (EINECS) designation

³PBT = Persistent Bioaccumulative and Toxic

⁴HMIRS = Hazardous Materials Information Resource System

⁵MIDAS = Munitions Items Disposition Action System

Important Upcoming Milestones

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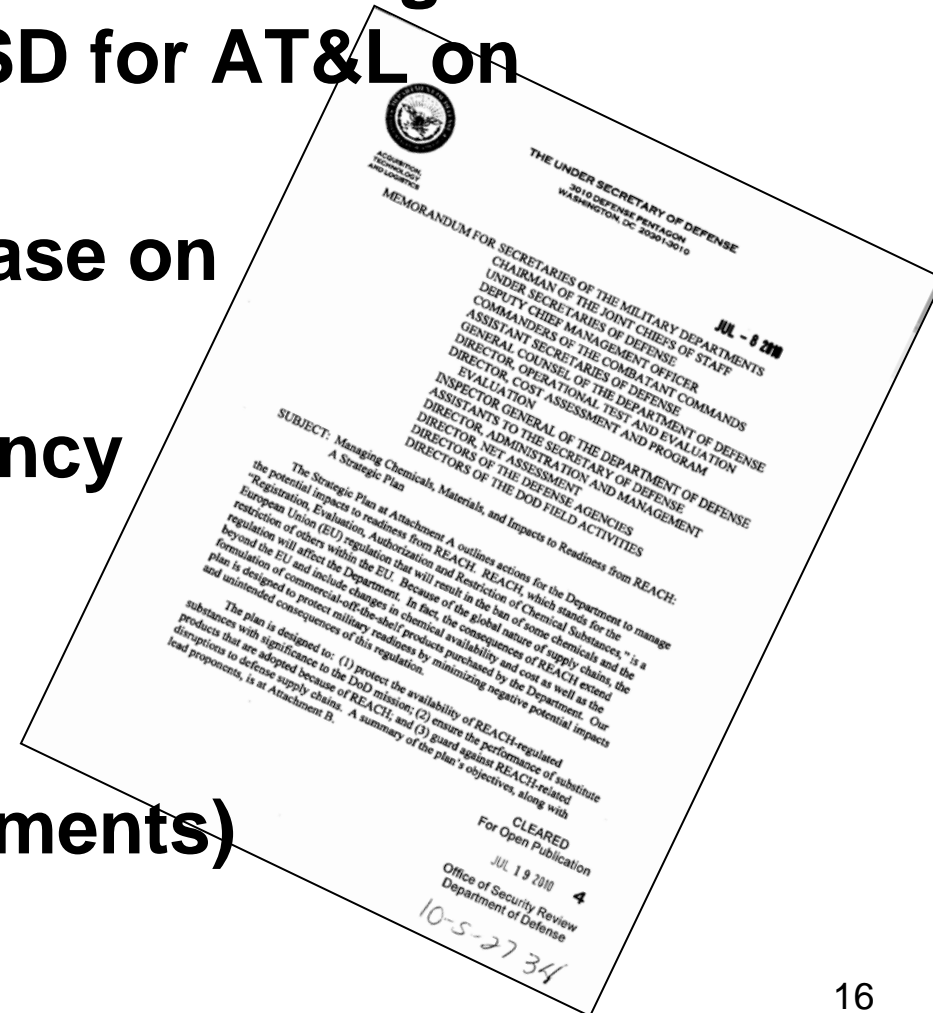
- **Imminent ‘improvements’ to Safety Data Sheets (SDSs), the EU equivalent of Material Safety Data Sheets (MSDSs)**
 - Limits use of product to specified applications
 - More explicit ‘exposure scenarios’
- **Transportation confusion and uncertainty**
 - Even though transportation governed by Globally Harmonized System of Classification and Labelling of Chemicals (GHS) by 2012
- **Eventual registration of products known as ‘articles’ that contain chemicals**
 - Many may not have traditional SDSs and/or MSDSs

Important Upcoming Dates

December 1, 2010	By this date the following pre-registered 'phase-in' substances should have been registered when supplied at: <ul style="list-style-type: none">• ≥ 1000 tonnes per annum (tpa) or;• ≥ 100 tpa and classified under CHIP as very toxic to aquatic organisms or;• ≥ 1 tpa and classified under CHIP as Cat 1 or 2 carcinogens, mutagens or reproductive toxicants
June 1, 2013	Deadline for registration of substances supplied at ≥ 100 tpa
June 1, 2018	Deadline for registration of substances supplied at ≥ 1 tpa

In Conclusion

- DoD Strategic Plan for 'REACH' signed off by Principal Deputy USD for AT&L on July 8, 2010
- Cleared for public release on July 19, 2010
- Defense Logistics Agency will play major role in making the Plan 'real'
- Other Agencies (State and Commerce Departments) engaging as well



For More Information on REACH

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- **Website**
 - http://ec.europa.eu/environment/chemicals/reach/reach_intro.htm
- **Legislation***
 - <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32006R1907:EN:NOT>
- **Directive***
 - <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32006L0121:EN:NOT>
- **See Also**
 - www.environmentaldefense.org/documents/6149_NotThatInnocent_Fullreport.pdf
 - 142-Page Comparative Analysis of Canadian, European Union and United States Policies

* Click on 'EN' for English versions.

Contact Information

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- **Electronic copy of public version of DoD's Strategic Plan for REACH available**
 - Questions?

THANK YOU FOR YOUR ATTENTION!