Greening Cleaning: Getting Science to the Shop

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**Abstract:**

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**Subject Terms:**

**Security Classification:**

- Report: Unclassified
- Abstract: Unclassified
- This Page: Unclassified

**Limitation of Abstract:** Same as Report (SAR)

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Implementing Alternatives

Targeted Processes
- Aircraft Maintenance
- Ship Maintenance
- Facility Maintenance
- Etc.

Candidate Solutions
- Aqueous Solvents
- Biobased Solvents
- Ozone
- Etc.

Partners
- NAVSEA
- NAVAIR
- Marine Corps
- Army
- Air Force
- NASA

Joint Services
Solvent Substitution Methodology

Screening Methodology
Test Protocol
Lab Testing
Field Testing
Process Approval
Update Manuals
User Awareness
Implementation Support

Implementation

Processes not requiring extra record keeping & control measures

TECHNOLOGY DRIVEN. WARFIGHTER FOCUSED.
Basic Concepts

- All cleaning applications are not equivalent
- Define the cleaning process
- Regulations continue to evolve
- Focus on capability and cost
Keys to Success

• Define performance
• Pursue the possible
• Focus on implementation
• Engage the user & understand their perspective
• Grow champions
Influence Materials Selection

CAD Drawings (Pro/E) -> MIUL – Bill of Materials

Material Usage Agreement (MUA) -> Material Selection List

Material Selection List -> Reports

Material-Chemical Restrictions

TECHNOLOGY DRIVEN. WARFIGHTER FOCUSED.
Provide Document Control

PERFORMANCE SPECIFICATION

CLEANER, GENERAL, FOR MILITARY SYSTEMS, LOW OR EXEMPT VOC, HAP-FREE
Communication
Collaboration
Coordination
JS3 Tools

• Methodology
• Information Exchanges
• Project Coordination
• Project Database
Summary

• Look forward
• Focus on capability & cost
• Be realistic
• Know your “customer”
• Put information in the right hands