Joint Service Solvent Substitution
Greening DoD Cleaning

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Implementing Alternative Technologies

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

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

Requirement

Joint Services Solvent Substitution Methodology

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

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

Implementation

Processes not requiring extra record keeping & control measures

TECHNOLOGY DRIVEN. WARFIGHTER FOCUSED.
Facilitate open communication
Encourage collaboration
Promote a well coordinated response to solvent issues
All cleaning applications are not equivalent
There is more to defining a cleaning process than identifying the existing cleaner.

Performance Requirements are the Key!
Regulations are subject to change
It’s not easy being Green!

And Green is not enough
Define Performance Requirements

• Why is there a cleaning process?
• What is the contaminant?
• What are the substrates?
• What are the possible downstream impacts?
• What are the overall process constraints?
• Adapt!
• Blends
• Containment
• Process Development
• Materials substitution
• Iterative interchange with chemical suppliers
• Control is the key
  – Supply control
    • ongoing commodity management
  – Process control
    • user education
  – Document control
    • new & updated specifications

• We have to get control!!
• JS3 Methodology
• Regular Information Exchanges
• Project Coordination
• JS3 Project Database
JS3 General Cleaning Specification Development Effort
• Finding alternatives is the “easy” part – performance requirements are the key
• Green is not enough – drive the performance & economic benefits
• No one size fits all solution or implementation strategy
JS3WG Co-Chairs

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