Supply Chain Sustainability and Hazardous Materials Minimization (HAZMIN) Team

Helping the Warfighter Become Green!

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ASETSDefense 2011: Sustainable Surface Engineering for Aerospace and Defense Workshop, February 7 - 10, 2011, New Orleans, LA. Sponsored by SERDP/ESTCP.
Agenda

• DLA Mission
• Full Spectrum Support
• Scope of DLA Customer Support
• DoD’s Supply Chain Manager
• Global Supply Chains
• DLA Supply Chain Sustainability & HAZMIN Team
• Primary Level Field Activity (PLFA) Support, Projects & Programs
Mission: Supporting the Warfighter

We are America’s combat logistics support agency. Our mission is to provide best value integrated logistics solutions to America’s Armed forces and other designated customers in peace and in war, around the clock, around the world.
DLA’s Scope of Support
We Are DLA

• America’s Combat Logistics Support Agency
  – 25,340 Civilians, 559 Active Duty Military, 759 Reservists
  – Located in 48 States/28 Countries

• Global Support To Warfighters by:
  – Processing an average of 116,087 requisitions per day
  – Producing an average of 10,987 contract lines awarded per day
  – Staffing 26 Distribution Depots Worldwide
    • Processed 22.8M Receipts and Issues during the past 12 months
  – Managing nearly 5M items through eight supply chains
  – Supporting more than 1,900 Weapon Systems
  – Providing nearly 84% of Services’ repair parts
  – Providing 100% of Services’ subsistence, fuels, medical, clothing & textiles, construction & barrier material
We Are DLA

in Elite Company

- FY04-FY10 sales/services of $28-$41B
  - #51 on the Fortune 500 list
  - FY 11 projected revenue of $41.5B
  - Third largest storage capacity of the top 50 Distribution Warehouses (Only FedEx and UPS have more)
  - 130M Barrels of Fuel sold in FY 10 and 129M in FY 09
  - Reused, transferred, disposed and donated nearly 26B per year in material across the supply chain

- Our reach extends far beyond DoD
  - Foreign Military Sales program supports 118 Nations
  - $1.6 B in Sales and 585K shipments in FY10
  - Supports Worldwide Humanitarian Relief
    - Federal Emergency Management Agency
    - Other federal and designated state and local customers
Global Supply Chains

**Troop Support**
- **CLI: Subsistence**
  - Food Service
  - Produce
  - Operational Rations
- **CLII: Clothing & Textile**
  - Recruit Clothing
  - Organizational Clothing & Individual Equipment
- **CLIV/VII: Construction & Equipment**
  - Facilities Maintenance
  - Equipment
  - Wood Products
  - Safety & Rescue Equipment
- **CLVIII: Medical**
  - Pharmaceutical
  - Medical/Surgical Equipment

**Aviation**
- **CLIX:**
  - Engine Components, Air Frames
  - Flight Safety Equipment, Maps
  - Environmental Products

**Land and Maritime**
- **CLIX: Maritime**
  - Valves, Fluid Handling
  - Electrical/Electronics
  - Motors, Packing/Gaskets
- **CLIX: Land**
  - Wheeled, Tracked & Heavy Vehicle Parts
  - Vehicle Maintenance Kits
  - Power Transmission/Engine/Suspension Components
  - Tires, Batteries and Small Arms Parts

**Energy**
- **CLIII: Energy**
  - DoD Executive Agent for all Bulk Petroleum
  - Natural Gas, Coal, Electricity
  - Aerospace Energy
DLA Supply Chain Sustainability and Hazardous Materials Minimization (HAZMIN) Team

• Consist of Representatives of DLA Headquarters and each of the Primary Level Field Activities
Buying Green – a Multifunctional Approach to Pollution Prevention

This 2-day workshop offered by the DLA Training Center (DTC) provides an overview of the Federal pollution prevention initiatives and how they relate to the DoD acquisition process. **Highlights** include:

- P2 Laws/Executive Orders/Regulations
- Green Procurement Program
- Environmentally Preferred Products
- Life-cycle Costing
- Acquisition Planning
- FAR requirements

- **Course Number & info:** (DCPSO00R750)
- **POCs:** Workshop Mgr - D850-6166, Comm 614-692-6166
DOD EMAILL

DOD’s Online Shopping Tool

- Web self-service capability for the DOD
- Sells both finished goods and services
- Supports contracts written by DLA, GSA, Services, Federal agencies
- Offers over 35M items from government stock, long term contracts and 1700 catalogs
- Currently adding about 20 vendors a month and over 750K items of content a month
- FY08 Total Sales $835M; Green Sales $7.3M
DOD EMAIL

DOD’s Online Shopping Tool
DLA Logistics Information Services Overview

**Logistics Data**
- Supports Military Services, Federal and International cataloging, standardization, and data quality
  - Supports provisioning requirements
    - 130 conferences / 290 systems
  - Demilitarization (DEMIL) Coding Mission
- Manages 6.5M National Stock Numbers
- Provides “Emergency Essential” experts in theater

**Logistics Systems**
- Provides Program Management and Sustainment of 15 key logistics data systems, such as:
  - Federal Logistics Information System, Asset Visibility, DOD EMALL, Item Unique Identification Registry, and DRMS Automated Information System
  - Supports DOD supply chain management lifecycle processes for item, vendor, and customer master data
- Asset Visibility
  - 7,590 Users in FY10
  - 2.4M queries in FY09

**Information Technology**
- 24 x 7 System Availability and Monitoring
  - Triage applications with help desk and developers
- DLA Contingency Communications (voice and data)
  - Supports J6 requirements globally
- Protects the infrastructure and system accreditation
- Supports DLIS and Defense Reutilization and Marketing Service (DRMS) in the CONUS

**Customer Support**
- DLA Customer Interaction Center
  - 642K Service Tickets in FY09
- U.S. Codification Bureau / International Outreach
  - 28 NATO and 30 “NATO Sponsored” Nations
- Training
  - 576 classes / 6,969 students in FY09
- Products Distributed in FY09
  - 371,497 (i.e. FED LOG)
  - 16,300 Tailored Reports/Data Extracts (accessing 16.2 billion data records)
Environmental Attribute

- Identifies products that have positive environmental characteristics, and signifies that the product meets strict, definable environmental standards and criteria from an approved environmental body.
Environmental Attributes

• Eight Environmental Attributes
  – ASBESTOS ALTERNATIVE PRODUCTS
    • EPA Test Method, Appendix E - 40 CFR, 763.163, Subpart E.
  – BIOBASED PRODUCTS
    • http://www.biopreferred.gov/Catalog.aspx
  – ENERGY EFFICIENT PRODUCTS
    • http://www.energystar.gov/
  – ELECTRONIC PRODUCT ENVIRONMENTAL ASSESSMENT TOOL PRODUCTS (EPEAT)
    • http://www.epeat.net/Search.aspx
  – NON-CADMIUM CONTAINING PRODUCTS
  – NON-MERCURY CONTAINING PRODUCTS
  – RECYCLED CONTENT PRODUCTS
  – LOW VOLATILE ORGANIC COMPOUND PRODUCTS
    • California Air Resources Board (CARB)
Environmental Attribute Code

• The Environmental Attribute Code (ENAC) is a two digit code that is used to provide a means of identifying items of supply that have environmentally preferred characteristics.
ENAC Examples

• BIOBASED PRODUCTS
  – DEFINITION: As defined by Farm Security and Rural Investment Act of 2002, "biobased products" are products determined by the U.S. Secretary of Agriculture to be commercial or industrial goods (other than food or feed) composed in whole or in significant part of biological products, forestry materials, or renewable domestic agricultural materials, including plant, animal, or marine materials. Biopreferred catalog:
  http://www.biopreferred.gov/Catalog.aspx

  • ENAC Name
    • AT 2-Cycle Engine Oils
    • AV Adhesive and Mastic Removers
ENAC Examples (cont.)

• ENERGY EFFICIENT PRODUCTS
  –DEFINITION: Product meets or exceeds the Department of Energy’s (DOE) Energy-Efficient Products Standards – Federal Energy Management Program (FEMP), or Energy Star label listed. FEMP:
  **FEMP-Lighting**
  HL Compact Fluorescent Lamps
  GE Fluorescent Tube Lamps
  **FEMP-Office Equipment**
  FW Computers
  FX Monitors
ENAC Cataloging Process

• Cataloging request from DLA product specialist
• DLIS cataloger validates request and takes cataloging action
  – Uses FIIG and answers ENAC MRC
    • ENAC assigned to NSN
Green Item Counts

• As of 1 April 2010 there are…..
  – 8076 National Stock Numbers with ENAC in the Federal Catalog
  – 494487 products listed in DODEMALL with an ENAC
  – Eight environmental attributes
  – 256 ENAC codes
Summary

• DLA/DLIS responsible for DoD cataloging policy
• DLIS provides green cataloging services
• Cataloging requests come from the DLA product specialists
• There are eight environmental attributes
  – Listed in the FIIGs
  – 256 ENAC codes
Aviation

INITIATIVES
LEAN / Six Sigma
Depot Level Reparables
Supply, Storage & Distrib.
Customer Targeted Outcomes
Gases / Cylinders Privatization
Chemicals / POL Privatization
Forward Presence
One Pass Pricing

AVIATION:
- Engine Components
- Air Frames
- Flight Safety Equipment
- Aviation Lighting
- Fasteners
- Bearings
- Maps
- Environmental Products
Re-refined Lubricating Oil

• **Basic Re-refined Oil Program**
  - API certified oil in your choice of 5W-30, 10W-30, 15W-40, 30 & 40
  - No minimum orders.
  - Packaged in Quarts, 5 Gallon Containers, and 55 Gallon Drums.
  - World-wide delivery from Vendor to Customers

• **Closed Loop Re-refined Oil Program**
  - API certified oil in your choice of 30, 40, 10W-30 and 15W-40
  - Small minimum orders.
  - Includes pick up of your used oil for re-refining.
  - CONUS delivery of packaged and bulk products
  - Available in Quarts, 5 gallon containers, 55 gallon drums, bulk deliveries
Reclaimed Engine Coolant
(aka Recycled Antifreeze)

• Conforms with EPA guidelines
• May be purer since recycling process reduces chlorines from hard water
• Commercial Item DLA Energyription that replaces 3 Mil Specs, specs same for virgin, recycled
• Army – use recycled only, DLA to do automatic substitution
• Other Military Services -- similar directions
• POC for product: 804-279-3995, DSN695
• POC for antifreeze recycling equipment: 804-279-3686, DSN695
DLA Supply Chain Sustainability/HAZMIN Projects

**DLA Aviation**

- MIL-PRF-85570, Type II Aircraft Cleaner
- MIL-PRF-85570, Type I Aerosol Foam and Premoistened Wipes Aircraft Cleaner
- Chrome Free Pretreatment Applicator Pen (MIL-DTL-81706 Type II)
- Electrical Contact Cleaner (MIL-PRF-29608 Class L CPC)
- Cold Spray/Kinetic Metallization Development for Military Aerospace Application
DLA Aviation (cont’d)

- Micro-Fiber Cloths for Non-Chemical Cleaning of Canopies and Optics
- Environmentally Compliant Chemical Paint Strippers
- COTS Environmentally Compliant Non-Structural Adhesives
- Non-Aqueous Low-VOC and HAP-Free Cleaner (MIL-PRF-32295 Type II) and Field Test
- Bio-Based Hydraulic Lubricants
- Aircraft Waterless Cleaners
- USAF Coating Removal

DLA Supply Chain Sustainability/HAZMIN Projects
DLA Supply Chain Sustainability/HAZMIN Projects

**DLA Aviation (cont’d)**

- Green Product Demonstration and Hazardous Minimization Initiatives for DoD
Disposition Services

- Reutilization (to Military Services & DOD Special Programs)
- Transfer (to Federal Agencies)
- Donation (to State and Local Agencies)
- Sales of excess DoD property
- Contingency Operation Support
- Demilitarization
- Precious Metals Recovery
- Hazardous Waste Disposal

119 Sites Worldwide
Reuse and Recycling Programs – 
providing maximum reutilization of DOD excess property

- **Scrap Recycling** - providing a recycling service with reimbursement going back to DOD Qualified Recycling Programs
- **Donation in Lieu of Disposal** - diverting property from landfill with no cost or reimbursement to Government (other than occasional shipping costs). Examples: low value recyclables such as - tires, wood, furniture, and hazardous materials
- **Electronics Recycling** - Computers for Learning Program, MOA with Federal Prison Industries (FPI) Unicor, Demanufacturing contracts
- **Precious Metals Recovery** - refining of precious metals bearing material/scrap to conserve resources; no reimbursement to generator
- **Hazardous Materials Reuse** - Maximizing lifecycles, minimizing the environmental risks and the costs associated with disposal
- **Hazardous Waste** - safe and compliant disposal management, tailored and cost efficient contracts with DLA assumed liability for 3rd party contamination sites

**POC:** DLA Customer Interaction Center 1-877-352-2253, options 3-2-1
DLA Disposition Services

**Electronics Demanufacturing**

- Increased recycling and solid waste diversion

- **Protection of the environment/controlled disposal of:**
  - Batteries of all types in electronics
  - Mercury switches
  - Heavy Metal content
  - Keeping leaded glass from PC monitors and TVs out of landfills

- **National Security:**
  - Ensures property with military capability not released into commerce
  - Destruction of secure information
Troop Support

SUBSISTENCE: CLASS I
- Food Service
- Produce
- Operational Rations

CLOTHING & TEXTILE: CLASS II
- Recruit Clothing
- Readiness
- Organizational Clothing & Individual Equipment

CONSTRUCTION & EQUIPMENT: CLASS IV / VII
- Facilities Maintenance
- Equipment
- Wood Products
- Safety & Rescue Equipment

INITIATIVES
- Prime Vendor Programs
- Medical Air Bridge (MAB)
- Common Food Management System (CFMS)
- Recruit Training Center Support
- Army Direct Ordering (ADO)
- Enterprise Buyers Forward
- Lumber Privatization

MEDICAL: CLASS VIII
- Pharmaceutical
- Medical/Surgical
- Readiness
- Equipment
Construction & Equipment
GREEN PROCUREMENT
Product List

Energy Efficient Lighting
• Compact Fluorescent Lamps (CFLs)
• Electronic Ballast
• LED Lighting

Energy Efficient HVAC
• Roof Top AC units
• Energy Saving Hot Water Heaters

Energy Saving Plumbing
• Water Conserving Fixtures

Environmentally Safe Building Materials
• Wallboards, Lumber
• Insulation

Building a Greener Tomorrow...Today

For further information please call our toll free number 1-800-352-2852
Biobased Plastic Flatware

- Biobased resin uses wheat to replace 50% of Polypropylene
- Meets or exceeds all current performance standards (impact strength, heat distortion, flexibility, biodegradability)
- Replacement into Unitized Group Ration A and Heat & Serve programs, then into daily dining facilities on military bases, hospitals, etc.

As shown above, the flatware is packaged with napkin, sugar, salt and pepper in a clear plastic bag.
DLA Supply Chain Sustainability/HAZMIN Projects

DLA Troop Support

Clothing and Textiles
- Biodegradable parachute for sonobuoy for Navy

Construction and Equipment
- Energy efficient lighting
- Energy efficient HVAC
- Energy saving plumbing
- Asbestos elimination (gaskets and seals)
DLA Troop Support (Cont’d)

Subsistence

• Working project with contractor on conversion from 50/50 to 100% bio-based cutlery
• Working project with contractor on conversion of MRE spoon and UGR utensils from plastic to 100% biobased
• Arctic Meal Module clamshell conversion from polystyrene to biobased/biodegradable item.
DLA Supply Chain Sustainability/HAZMIN Projects

DLA Troop Support (Cont’d)

Subsistence (Cont’d)

- Implementation of "Frank's Green Tips" - a monthly paragraph that talks about a specific subsistence "green" initiative and how it may relate to an employee can be "green" in a similar manner in their personal life.
- Installation of recycle containers in café at NAVICP.
DLA Supply Chain Sustainability/HAZMIN Projects

DLA Troop Support (Cont’d)

Medical

- Pharmaceutical Prime Vendor Reverse Distribution Program.
  - $5 Million credit to customers annually
  - Proper disposal of expired drugs by the manufacturer through a co-generation incinerator. Items no longer disposed in wastewater or landfills.

- DIN-PACS (Digital Imaging Network Picture Archiving and Communications Systems). Eliminates need for:
  - X-ray film, processing machine, fixer, developer, wash water and recovery of silver.

- Patient care items such as wash basins, urinals, and emesis basins manufactured from 100% recycled newsprint with a wax coating.
  - Eliminates use and disposal of plastic items.
DLA Supply Chain Sustainability/HAZMIN Projects

Medical (continued)

• Monthly Green Tips are distributed to all Medical employees emphasizing energy, water, and paper conservation.
• Trade in and proper disposal of old x-ray systems, x-ray tubes, circuit boards, etc.
• Encourage attendance and monitor course completions for the two day Buying Green course.
• Medical Buy Green external website: https://phl1s331.dscp.dla.mil/portal/GeneralMedical/GoGreen.aspx
Land and Maritime

INITIATIVES

Tires Privatization Successor

MRAP/M-ATV Sustainment

Afghan Sustainment

Depot Level Reparables

Retail Supply, Storage & Distribution

Demand Planning Improvement Initiatives

Army Reset Support

LAND:

• Wheeled, Tracked & Heavy Vehicle Parts
• Vehicle Maintenance Kits
• Power Transmission/Engine/Suspension Components
• Tires
• Batteries
• Small Arms Parts

MARITIME:

• Valves
• Fluid Handling
• Electrical/Electronics
• Motors
• Packing/Gaskets
DLA Supply Chain Sustainability/HAZMIN Projects

DLA Land and Maritime

- Non- Cadmium Plated Connectors
- Asbestos elimination (brake linings)
Energy

INITIATIVES

- CENTCOM AOR Support
- Open Market Bunker Support
- Bulk Terminal Ops Privatization
- Garrison / Base Energy Support
- Utilities Privatization Support
- Alternative Fuel and Renewable Energy

ENERGY:

- DOD Executive Agent for all Bulk Petroleum
- Natural Gas, Coal, Electricity
- Aerospace Energy
DLA Supply Chain Sustainability/HAZMIN Projects

DLA-Energy

- Bio-diesel fuels (derived from vegetable oils)
- Ethanol and gasoline blend (85% ethanol)
- Hydro-treated renewable jet (plant and algal oils and animal fats)
- Hydro-treated renewable marine diesel (plant oils)
- Multiple feedstock bio-waste to energy project (municipal waste, yard clippings, wood)
- Hawaii GIFTPAC program to replace 25% of DoD procured petroleum derived fuel with biofuels
- Partnering with ATA, USDA, and DOE to examine potential areas for biofuels deployment in Pacific Northwest
Distribution

• Receive, Store, and Issue Globally

• In-transit Visibility

• Dedicated Delivery / Pure Pallets
Questions?

**Operational and Warfighter Issues:**

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