



Pentagon Contracting Initiatives: Affirmative Procurement and Energy Conservation Defense Facilities Directorate, WHS

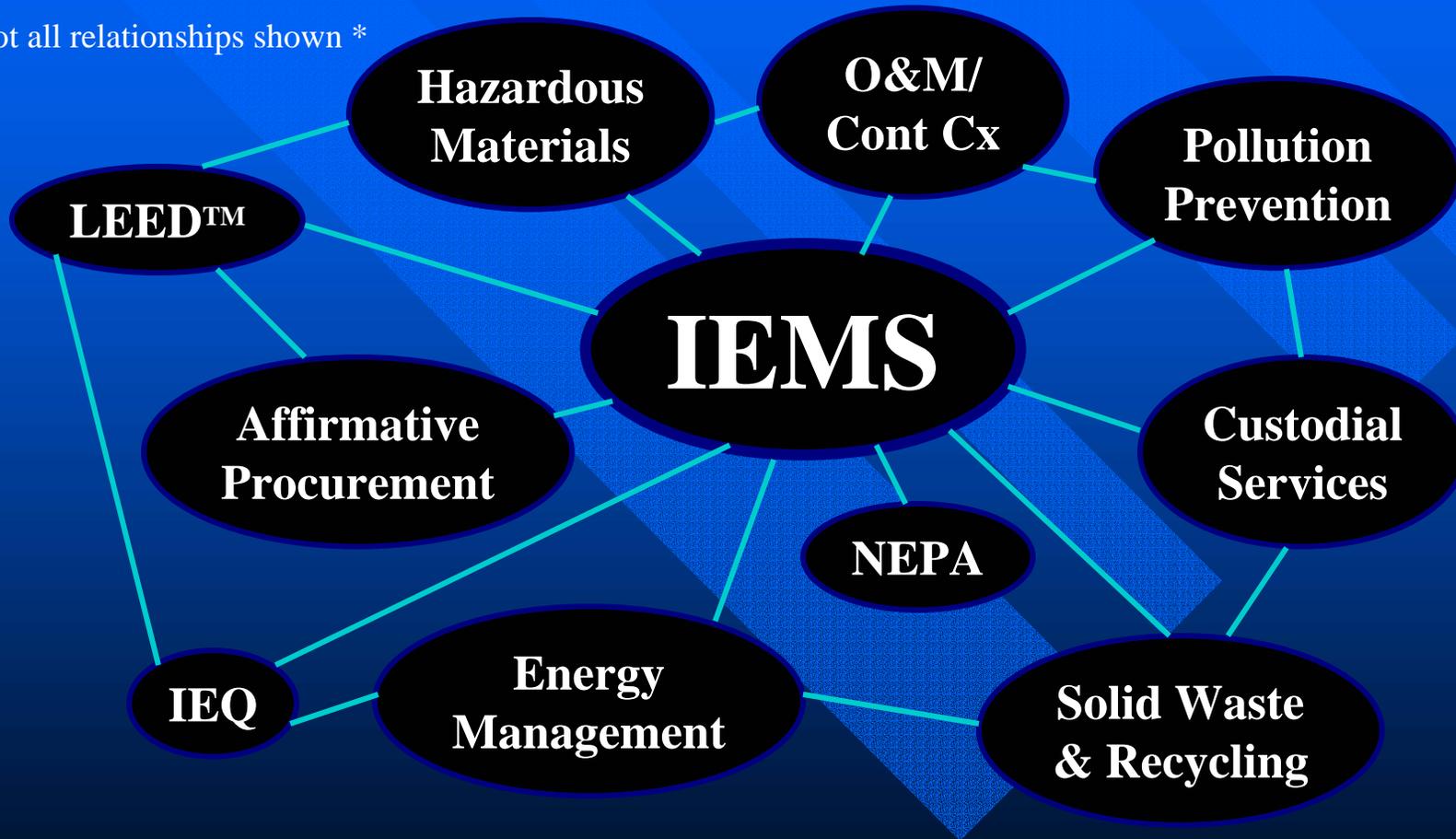


Integrated Environmental Management System (IEMS)

- Technical Support Team
 - Positively influences all aspects of building operations
 - Enhances quality of life for building occupants, while minimizing adverse environmental impacts
- LEED®
 - Only a benchmark
 - Team will adopt an integrated approach
- Development of Metrics

IEMS -- Program Integration

* Not all relationships shown *



Affirmative Procurement Requirements

- All applicable facility contracts incorporate EPA's Comprehensive Procurement Guidelines
- Proposals require Environmental Stewardship Plans
- Require cost-effective waste reduction programs
- Certification from contractors regarding recovered/recycled materials

Examples of Pentagon Reservation Contracts with “Green” Language

- Operations & Maintenance (O&M)
- Major Construction
- Repairs & Alterations (R&A)
- Integrated Pest Management (IPM)
- Horticulture
- Custodial/Recycling
- Snow Removal

Roads and Grounds

EPP Parking Lot Pilot Project

- Researched the market
- Identified environmental attributes (baseline)
- Evaluated EPP Plans in proposals
- Provided contractor a price differential
- Recycled content
 - Crack sealer (10% crumb rubber)
 - Asphalt (base course 25%, surface course 20%)
- Asphalt recycling

Repairs and Minor Alterations

Interior Renovation EPP Pilot Project

- Researched the market
- Cited environmental attributes in contract (baseline)
- Included EPP factors in performance evaluations
- Contract specifications required:
 - Energy efficient lighting
 - Gypsum wall board (100% recycled paper; 15% weight)
 - Suspended ceiling tile (60% recycled content)
 - Steel (28% recycled content)
 - Mineral wool insulation
 - Low VOC paints and sealants

Repairs and Minor Alterations (cont.)

Other Products Included:

- Wood from sustainable, managed forests
- Concrete masonry units (50% recycled content)
- Low water use plumbing fixtures
- Ceramic tile (20% recycled content)
- Construction debris recycling
- Packaging, labeling and instructions made from recycled materials

For more information see: <http://www.epa.gov/opptintr/epp/>

Sustainable Construction

- Pentagon Renovation & Construction Program Office (PENREN/C)
- Web site for Sustainable Design:

[http://renovation.pentagon.mil/
sustainabledesign.htm](http://renovation.pentagon.mil/sustainabledesign.htm)

New Custodial Contracts

- Performance Based Award Fees
- Require Environmental Stewardship Plans:
 - Affirmative Procurement Program for EPP
 - Products specified in EPA's Comprehensive Procurement Guidelines
 - Waste minimization and recycling programs
- Requires contractor to assist in Government recycling program
- Plastic trash bags (25% post-consumer content)
- Waste collection carts and containers
 - Noncombustible or flame resistant construction
 - Constructed of environmentally preferable materials

New Custodial Contracts (cont.)

- Bathroom tissue (100% recovered materials and 50% post-consumer content)
- Toilet seat covers (100% recovered materials and 50% post-consumer content)
- Paper towels (100% recovered materials and 40% post-consumer content)
- General purpose industrial wipes (100% recovered materials and 40% post-consumer content)

Example: Recycling Program

- Assist Recycling Program via custodial contracts
 - Empty recycling bins and separate materials
 - Custodial products with recycled content
- Development of metrics
 - Trend data
 - Improve Program execution
- Affirmative Procurement of EPPs
- Education and outreach

Earth Week Outreach Activities



Earth Day booth display on the Pentagon Concourse, April 2004.



John Tyler Elementary School children touring the Pentagon during Earth Week 2004.



John Tyler Elementary School children receiving awards for their Earth Day art work.

Other Contracting Initiatives

- Initiate Recycling Program that diverts 50% of waste stream from landfills
- Integration of EPP products into all contracts
- Integrated sustainable design
- Meet or exceed EO 13101 & 13123
- Energy budgets
- Life cycle cost analysis
- Construction energy conservation plan
- Building commissioning

Contracting Initiatives (cont.)

Specific EPP Goals

- No materials manufactured with or containing:
 - Ozone-Depleting Substances (ODS)
 - Polyvinyl Chloride (PVC) or other chlorine-based compounds
 - Volatile Organic Compounds (VOC)
- Use building materials and products that:
 - Reduce greenhouse gas emissions
 - Conserve resources
- Use only wood products originating in well-managed forests certified by the Forest Stewardship Council

Examples of Affirmative Procurement Program Results

- 47,215 ft millwork from sustainably managed forests
- 449 doors from sustainably managed forests
- 420,000 ft² gypsum wallboard (9 football fields)
- 273,222 ft² recycled ceiling tiles (6 football fields)
- 3,279,000 ft² low VOC or recycled paint (11,000 gal)
- 59,003 ft² recycled carpet tile
- 53,500 ft of 28% recycled steel wall studs (10 mi)
- 496,000 lbs construction debris recycled

Other Initiatives and Opportunities

- Deploy Environmental Management System (EMS) at worker level
- Capture EMS data (metrics) via daily work orders
- Energy conservation maximized, in part, by:
 - Building Commissioning – shown to reduce energy consumption by 35%
 - Direct Digital Controls (DDC) – Pentagon Building Operations and Command Center (BOCC) can:
 - ❖ Quickly identify HVAC failures
 - ❖ Optimize building systems performance

*For Specific Examples (on CD) of
“Green” and Energy Conservation
Contract Language*

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