



Office of Environment, Safety, and Health

Integrating FEC Goals into the DOE Environmental Protection Program

Federal Electronics Stewardship Conference

Thomas Traceski

Jeff Eagan

US Department of Energy

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Overview

- **DOE Environmental Protection Policy**
- **New Pollution Prevention Goals**
- **Federal Electronics Challenge (FEC)
Strategies**

DOE Environmental Protection Policy

- **DOE Order 450.1 *Environmental Protection Program***
 - **Driver for Pollution Prevention and Environmental Stewardship at DOE**
 - **Establishes *Responsibilities* and *Requirements***
 - ***Responsibilities* = Line Management**

DOE Environmental Protection Policy (Cont'd)

- ***Requirements (DOE Order 450.1)***
 - **Implement Environmental Management Systems (EMS) at DOE sites**
 - **EMS includes Objectives and Measurable Targets for achieving DOE Pollution Prevention (P2) Goals**
 - **Also Budget, Performance Monitoring, Etc.**

Past DOE Pollution Prevention (P2) Goals

- **Pollution Prevention Goals Established 1999**
 - **By 2005, reduce generation of various waste streams by certain percentages from 1993 baselines.**
 - **Provided clear metric for Headquarters but sites implementation was problematic**
 - **Early accomplishments driven by *direct* funding from Headquarters**
 - **Direct funding reduced 2000, further cut in 2001 and 2002, and eliminated in 2003**

New Pollution Prevention Goals

P2 Goals for 2006 and Beyond

- 1. Waste Prevention**
- 2. Toxic Chemical Release Reduction**
- 3. Environmentally Preferable Purchasing**
- 4. Sustainable Environmental Stewardship**
 - Green Building**
 - Green Chemistry**
- 5. Post-Consumer Material Recycling**

New Pollution Prevention Goals (Cont'd)

- ◆ **Replaced old P2 Goals that expired end of 2005**
 - **DOE O 450.1, Chg 2 incorporates new P2 Goals approved December 2006**
 - **New Strategies (P2 Practices) provided to achieve new P2 Goals**
- ◆ **Emphasis on mission accomplishment as well as environmental protection**
 - **Reduce environmental hazards, protect natural resources, and minimize future environmental legacies**
 - **Avoid pollution-control costs, reduce regulatory recordkeeping and reporting burden, protect health of workers and public, minimize mission liability**

DOE'S FEC Electronic Stewardship Strategies

- **Environmentally Preferable Purchasing**
 - **Require Preference for Products Qualified Through Electronic Procurement Environmental Assessment Tool (EPEAT)**
 - **Three Tiered EPEAT Rating System Required**
- **Extend Useful Lifespan of Computers**
 - **Apply Software Upgrades**
 - **Enable Power Management Capabilities**

DOE'S FEC Electronic Stewardship Strategies (cont'd)

- **Post-consumer Material Recycling**
 - **Reuse And Recycle for disposition of End-of-life and Surplus Electronics through environmentally compliant processes:**
 - **READ, UNICOR, GSA 899, Professional Recyclers,**
 - **CFL and other exchange programs**
 - **Identify Resources For Reuse/Recycling In Facility Budget Processes**

P2 Goals and FEC Strategies

<p>GOAL</p>	<p>PROTECT THE ENVIRONMENT AND ENHANCE MISSION ACCOMPLISHMENT THROUGH <i>ENVIRONMENTALLY PREFERABLE PURCHASING</i></p>
<p>OBJECTIVE</p>	<p>Reduce environmental hazards, conserve environmental resources, minimize life-cycle cost and liability of DOE programs, and maximize operational capability through the procurement of recycled-content, bio-based-content and other environmentally preferable products thereby minimizing the economic and environmental impacts of managing toxic by-products and hazardous wastes generated in the conduct of site activities</p>
<p>STRATEGIES</p>	<ul style="list-style-type: none"> • Federal Electronics Challenge – Specify a preference for environmentally preferable electronics qualified through the Electronic Procurement Environmental Assessment Tool (EPEAT) or its successor, in the solicitation and acquisition of desktop computers, notebooks, and monitors. – Utilize the EPEAT network to identify specific models of desktop computers, notebooks and monitors certified by manufactures and vendors as environmentally preferable and listed according to three tiers of ascending environmental performance and order of preference—bronze, sliver and gold (www.epeat.net)

P2 Goals and FEC Strategies (Cont'd)

<p>GOAL</p>	<p>PROTECT THE ENVIRONMENT AND ENHANCE MISSION ACCOMPLISHMENT THROUGH <i>POST-CONSUMER MATERIAL RECYCLING</i></p>
<p>OBJECTIVE</p>	<p>Protect environmental resources, minimize life-cycle cost of DOE programs, and maximize operational capability by diverting materials suitable for reuse and recycling from sanitary landfills thereby minimizing the economic and environmental impacts of waste disposal, and long-term monitoring and surveillance</p>
<p>STRATEGIES</p>	<p>Federal Electronics Challenge – Reuse/Recycle computers, monitors and peripheral information technology electronics</p> <ul style="list-style-type: none"> – Extend the useful lifespan of computers through software upgrades; enable power management capabilities, and – Utilize the recycling services available through the following sources as an environmentally compliant means for disposition of end-of-life electronics: <ul style="list-style-type: none"> · Environmental Protection Agency Recycling Electronics and Asset Disposition (READ) Services Government Wide Acquisition Contract (www.epa.gov/oam/read/index.htm), or · ... · Recyclers that are members, in good standing, of one or more of the following professional associations: <ul style="list-style-type: none"> - International Association of Electronic Recyclers - Institute of Scrap Recycling Industries - National Recycling Coalition - Electronic Industries Alliance

DOE FEC Participation

- **DOE Signs FEC MOU (11/04), Joins Federal Environmental Stewardship Working Group**
- **DOE AEE/CIO Memo (6/05) Encourages DOE Facilities to Participate in FEC, Become Partners**
- **Ten DOE Facilities Join FEC in 2004-05**
- **DOE AEE 11/05 Memo (11/05) Promotes Environmental Reuse and Recycling Challenge**

DOE FEC Participation (cont'd)

January 2006

- **DOE Headquarters (HQ) EMS Incorporates FEC**
 - **EPEAT adopted as preferential standard by CIO before mid-2006 implementation**
 - **FEC adopted for Targets and Indicators including annual documentation of electronics procurement and recycling activities**
- **DOE HQ seeks FEC Bronze Award for Electronics Operations and Maintenance, including energy management strategies, software recycling, and centralized operations**
- **Four DOE facilities submit FEC-based electronics stewardship strategies for Closing the Circle competition**

Summary

- **DOE Order 450.1 Chg 2 Drives FEC-based Strategies for all DOE Facilities whether FEC Partners or not.**
- **DOE “Greening the Government” reports – EO 13101 and 13148 – now measure annual progress on FEC strategies for all facilities and Department as a whole.**
- **EPEAT preference specified for electronics purchasing in advance of mid-2006 operations for all facilities.**

For Further Information . . .

Full Text of DOE Order 450.1 Chg 2:

<http://www.directives.doe.gov/pdfs/doe/doetext/neword/450/o4501c2.html>

Tom Traceski

thomas.traceski@eh.doe.gov

(202) 586-6374

Jeff Eagan

Jeff.eagan@eh.doe.gov

(202) 586-4598

Al Sikri

Atam.sikri@eh.doe.gov

(202) 586-1879