# U.S. Department of Energy Environmentally Preferable Purchasing Program Handbook April 2008

Office of Environmental Policy and Assistance
Office of Energy Efficiency and Renewable Energy
Office of Procurement and Assistance Management

# **Preface**

Pursuant to the Resource Conservation and Recovery Act Section 6002 and Executive Order 12873 (superseded by Executive Order 13101, which was superseded by Executive Order 13423), the U.S. Department of Energy (DOE) established an *Affirmative Procurement Program (APP) for Products Containing Recovered Materials* in May 1994. This program and corresponding guidance document addressed the affirmative procurement of 5 recycled content products designated by the U.S. Environmental Protection Agency (EPA) between 1983 and 1989. In May 1995, EPA designated 19 new products, and DOE updated the guidance document August 1996, accordingly. In November 1997 and January 2000, EPA designated additional products, bringing the total to 54 products, and, in April 2004, EPA designated 7 new products for a present total of 61 designated recycled content products.

In addition to products with recycled content, subsequent Acts of Congress and Presidential executive orders have designated other product attributes for Federal agencies to prefer in their purchasing of supplies and services. The attributes designated to date are biobased content, energy/water efficient, alternate fuels/vehicles, non-ozone depleting, recycled content, and environmentally preferable (which includes attributes with a lesser or reduced effect on human health and the environment, such as less toxic).

This document, *U.S. Department of Energy Environmentally Preferable Purchasing Program Handbook*, hereinafter called the "Handbook," addresses those designated products with environmentally preferable attributes as well as other preferable attributes. The Handbook supersedes the APP guidance issued in August 1996, the APP strategy issued November 2000, and the *Overview* issued June 2006.

Contact: Don Lentzen, Office of Environmental Policy and Assistance (HS-22), (202) 586-7428 or <a href="mailto:donald.lentzen@hq.doe.gov">donald.lentzen@hq.doe.gov</a>

ii

# **Table of Contents**

	•		ferable Purchasing Program	
2.1			uirements Guidance	
	2.1.1		Congress	
	2.1.2	Executiv	ve Orders	2
	2.1.3		nent of Energy Orders	
	2.1.4	Acquisit	ion Regulations and Guidance	5
	2.1.5		ted Attributes	
	2.1.6		ted Sustainable Practice Areas	
	2.1.7		oility	
	2.1.8		nd Responsibilities	
			Agency Official for Executive Order 13423	
			DOE Roles and Responsibilities	
	2.1.9		ling in DOE Site Systems	
		2.1.9.1	Environmental Management System	.13
			Purchasing Systems	
	2.1.10		ations Review	
	2.1.11		cle Cost Analysis	
	2.1.12		, Mandatory, and Preferred Supply Sources	
2.2	Promo	tion Prog	gram	.16
2.3	Estima	tion, Cer	tification, and Verification Program	.17
2.4	Annua	I Review	, Monitoring/Tracking, and Reporting Program	.17
	2.4.1	Monitori	ng/Tracking	.17
	2.4.2	Reportin	ng	.18
		2.4.2.1	Office of Management and Budget Scorecard	
			Reports	.19
		2.4.2.2		
			Environmentally Preferable Purchasing Report	to
			Congress	.20
		2.4.2.3	U.S. Department of Energy Pollution Prevention	
			and Sustainable Environmental Stewardship	
			Goals Report	.22
		2.4.2.4	Annual Federal Energy Management Program	
			Reports	.22
		2.4.2.5	Other	.23
2.5	Review		udits	
	2.5.1		mentally Preferable Purchasing Program Audit	
	2.5.2		Compliance Inspections	
	2.5.3		Internal Review	
0.0	Award	•		24

	2.7 Checklist for Successful Site EPP Programs	25
3.0	Acronyms	
	Glossary of Terms	
	Resources	

# 1.0 Purpose

Pursuant to Federal statutes and Presidential executive orders, Federal agencies are required to establish Environmentally Preferable Purchasing programs. This requirement recognizes the Federal government's purchasing power can be used to expand markets for environmentally preferable products having societal and economical benefits such as conservation of natural resources, waste reduction, improved public health, and energy security. In response, it is DOE policy and long standing practice to purchase designated products containing environmentally preferable attributes to the maximum extent practicable when available, affordable and effective.

This Handbook of the DOE Environmentally Preferable Purchasing Program serves as a guide to DOE program and field elements on environmentally preferable purchasing (EPP) as an integrated component of environmental management and purchasing systems within DOE. This Handbook identifies and summarizes the policies, guides, procedures, roles and responsibilities, reporting, and awards program that comprise the EPP Program at DOE, and provides links to relevant website postings.

# 2.0 Environmentally Preferable Purchasing Program

The DOE Environmentally Preferable Purchasing Program consists of the following four elements:

- <u>Policies:</u> including responsibilities and requirements for EPP, embedding in environmental management and purchasing systems, and giving preference to designated and other environmentally preferable products in contracts and other purchasing vehicles
- <u>Promotion</u>: of EPP in the acquisition of supplies and services through guidance/procedures, training, best-practices sharing, and problem solving technical support
- <u>Verification</u>: Estimation, certification, and verification that recycled content products meet the designated specifications
- Annual EPP review: monitoring, tracking, and reporting purchases designated to be preferred

# 2.1 Policy and Requirements Guidance

The Department of Energy policy is committed to environmental stewardship through:

 Integrating pollution prevention and waste minimization, resource conservation (including environmentally preferable purchasing), and environmental compliance into site planning and decision-making  Seeking cost-effective means to minimize environmental impact of Departmental activities

This commitment is in response to Acts of Congress, Executive Order 13423, and DOE orders and regulations that specify the Federal purchase of products and materials with specific attributes (alternative fuels/vehicles, biobased/recycled content, energy/water efficient, EPEAT registered electronics, non-ozone depleting, and other environmentally preferable/non-toxic or non-hazardous attributes). It is DOE policy to go beyond compliance with all requirements and to proactively initiate transition to products with the designated attributes and to systems that promote these sustainable practices.

## 2.1.1 Acts of Congress

**Energy Policy Act of 2005** 

Farm Security and Rural Investment Act of 2002, Section 9002

Resource Conservation and Recovery Act of 1976, Section 6002

#### 2.1.2 Executive Orders

Executive Order 13423, "Strengthening Federal Environmental, Energy, and Transportation Management," issued January 26, 2007 - EO 13423 supersedes and builds on the success of a suite of environmental executive orders, "directing Federal agencies to integrate and update prior practices and requirements into a cohesive, strategic approach to further ensure enhanced performance and compliance with statutory and other legal requirements" ("Instructions for Implementing EO 13423," p. 1). The EO 13423 instructions contain information pertinent to applying the requirements of EO 13423.

- The superseded executive orders are: EO 13101, "Greening the Government through Waste Prevention, Recycling and Federal Acquisition"
- EO 13123, "Greening the Government through Efficient Energy Management"
- EO 13134, "Developing and Promoting Biobased Products and Bioenergy"
- EO 13148, "Greening the Government through Leadership in Environmental Management"
- EO 13149, "Greening the Government Through Federal Fleet and Transportation Efficiency"

<u>Executive Order 13221, "Energy Efficient Standby Power Devices,"</u> issued August 2, 2001 - EO 13221 directs Federal agencies to ensure the off-the-shelf standby power devices they purchase or equipment containing an internal standby power function uses no more than one watt in the standby power mode.

2

April 3, 2008

## 2.1.3 Department of Energy Orders

Three Department of Energy Orders, in particular, affect environmentally preferable purchasing. Listed in order of impact on EPP, they are:

#### DOE Order 450.1A, Environmental Protection Program

<u>Purpose</u>: To implement sound stewardship practices that are protective of the air, water, land, and other natural resources impacted by DOE operations, and by which DOE cost effectively meets or exceeds compliance with applicable environmental; public health; and resource protection laws, regulations, and DOE requirements. The objectives are:

- To implement sustainable practices for enhancing environmental, energy, and transportation management performance, as stipulated in Section 3(a) of EO 13423, through environmental management systems that are part of Integrated Safety Management systems established pursuant to DOE P 450.4, dated 10-15-96
- To achieve the DOE Sustainable Environmental Stewardship goals found in Attachment 2 of DOE Order 450.1A

Environmentally Preferable Purchasing is identified as a requirement for DOE elements under DOE Order 450.1A. The Order establishes DOE Sustainable Environmental Stewardship goals and objectives. It also lists strategies for achieving the goals, including environmentally preferable purchasing, through the use of environmental management systems. Strategies for achieving the DOE goal of protecting the environment and enhancing mission accomplishment through environmentally preferable purchasing include specifying environmentally preferable products in acquisitions.

# DOE Order 430.2B, Departmental Energy, Renewable Energy and Transportation Management

<u>Purpose</u>. To provide requirements and responsibilities for managing Department of Energy energy, utility supplies and services, sustainable buildings, and fleets. The objectives are:

• To meet, lead or exceed the goals of all applicable laws, executive orders, and Federal regulations with respect to continuous energy efficiency and water conservation improvements, increased and pervasive use of on-site, distributed renewable and clean energy resources, increased private sector development of utility-scale renewable and clean energy sources on DOE and other Federal land, sustainable buildings, optimized utilization of alternative fuel, hybrid, and plug-in electric vehicles, and the expansion and maintenance of an alternative fuel infrastructure at all DOE facilities, laboratories, and sites

3

April 3, 2008

 To accomplish on a Department-wide basis and through the maximum utilization of private sector, third-party financing, particularly from Energy Savings Performance Contracts and Utility Energy Services Contracts applied in a life cycle cost effective manner

Environmentally Preferable Purchasing helps DOE sites meet several of the DOE Order 430.2B leadership goals:

- Purchasing ENERGY STAR qualified and FEMP designated equipment contributes to the reduction of a site's energy intensity
- Purchasing water efficient equipment and recycling grey water contributes to the reduction of water consumption
- Purchasing renewable energy (electrical and thermal) and purchasing and installing renewable energy generation systems contributes to those goals
- Purchasing and installing sustainable building materials and practices throughout the Department's existing building assets contributes to the attainment of Leadership in Energy and Environmental Design (LEED) Gold certification for all new construction and major renovations
- Purchasing alternative fuels and vehicles contributes to that goal
- The increase in development, generation and consumption of electric and thermal energy from renewable energy sources and combined heat and power sources

DOE Order 413.3A, Program and Project Management for the Acquisition of Capital Assets

#### The objectives are:

- To provide DOE, including the National Nuclear Security Administration, with project management direction for the acquisition of capital assets with the goal of delivering projects on schedule, within budget, and fully capable of meeting mission performance, safeguards and security, and environmental, safety, and health standards
- To implement Office of Management and Budget Circulars A-11 Part 7, A-123, A-127, and A-130
- To implement DOE P 413.1, Program and Project Management Policy for the Planning, Programming, Budgeting, and Acquisition of Capital Assets, dated 6-10-00

Environmentally Preferable Purchasing helps DOE sites meet the objectives of DOE Order 413.3A by ensuring materials in the capital assets acquired not only meet the

designated product purchasing requirements but contribute points toward achieving LEED certification.

# 2.1.4 Acquisition Regulations and Guidance

DOE contracting activities and acquisitions of supplies and service are subject to the Federal Acquisition Regulation (FAR) and the Department of Energy Acquisition Regulation (DEAR). The FAR directs agencies to a) implement cost-effective contracting preference programs promoting energy efficiency, water conservation, and the acquisition of environmentally preferable products and services and b) employ acquisition strategies that affirmatively implement the following environmental objectives (FAR 23.703):

- Maximize the use of environmentally preferable products and services including products and services with recovered or biobased content as those products are designated by the EPA or the U.S. Department of Agriculture (USDA)
- Promote energy-efficiency and water conservation
- Eliminate or reduce the generation of hazardous waste and the need for special material processing (including special handling, storage, treatment, and disposal)
- Promote the use of nonhazardous and recovered materials
- Realize life-cycle cost savings
- Promote cost-effective waste reduction when creating plans, drawings, specifications, standards, and other product descriptions authorizing material substitutions, extensions of shelf-life, and process improvements
- Substitute safe alternatives to ozone-depleting substances (FAR 23.803)

The DEAR establishes departmental acquisition policies which implement and supplement the FAR. Pertinent preferable purchasing-related sections of the <a href="DEAR">DEAR</a> are:

- DEAR 923 Environment, Conservation, Occupational Safety, and Drug-Free Workplace
- DEAR 970.2304-2 Use of Recovered Recycled Materials Contract Clause directing flow down requirements to contractors and sub-contractors
- DEAR 970.2307 Contracting for Environmentally Preferable and Energy-efficient Products and Services
- DEAR 970.2307-1 Motor vehicle fleet operations

The DOE Acquisition Guide, Chapter 23 "<u>Strengthening Federal Environmental, Energy and Transportation Management in Acquisition"</u> ensures DOE Acquisition personnel are aware of the many environmental, energy, and transportation considerations affecting the acquisition process. These include EO 13423, Strengthening Federal Environmental, Energy, and Transportation Management, and EO 13221, Energy Efficient Standby Power Devices.

## 2.1.5 Designated Attributes

Recycled and biobased content products are designated by Section 6002 of the Resource Conservation and Recovery Act and Section 9002 of the Farm Security and Rural Investment Act, respectively. These acts specify that Federal agencies must institute practices and procedures giving preference to the specification and procurement of recycled content and biobased content products, respectively. Once the U.S. Environmental Protection Agency (in the case of recycled content products) or the U.S. Department of Agriculture (in the case of biobased content products) designates a product, procuring agencies are required to comply within 1 year of the date of designation by purchasing the product with the content specified.

The U.S. Environmental Protection Agency (EPA) has **designated recycled content** products in the following general product categories:

- Construction Products
- Landscaping Products
- Non-Paper Office Products
- Paper and Paper Products
- Park and Recreation Products
- Transportation Products
- Vehicular Products
- Miscellaneous Products

See <u>EPA Comprehensive Procurement Guidelines</u> for information on recycled content products designated for purchase, recycled content specifications, percentages, and product suppliers.

The U.S. Department of Agriculture (USDA) has or will have **designated biobased content products** in the following general product categories:

6

- Adhesives
- Constructions Materials
- Fibers, Paper, Packaging
- Fuel Additives
- Inks
- Landscaping Materials
- Lubricants and Functional Fluids
- Paints and Coatings

April 3, 2008

- Plastics
- Solvents and Cleaners
- Sorbents

See <u>USDA's BioPreferred Procurement Program</u> for information on biobased content products designated for purchase, biobased content specifications, percentages, and product suppliers.

The other product attributes designated by Congress which DOE gives procurement preference to are:

- Alternative fuels
- Alternative fuel vehicles
- Energy efficient
- Environmentally Preferable (reduced effect on human health and the environment)
- Non-ozone depleting
- Water efficient

# 2.1.6 Designated Sustainable Practice Areas

**Electronic stewardship and sustainable buildings** are areas designated by the Energy Policy Act of 2005, EO 13423, and two Memoranda of Understanding (MOU). DOE became a signatory to both MOUs as part of its policy commitment to environmentally preferable purchasing.

For **electronic stewardship**, EO 13423 and the *Instructions for Implementing EO* 13423 direct each agency and its facilities to

- Acquire 95 percent of their electronic products as Electronic Product Environmental Assessment Tool (EPEAT)-registered (for products for which there are EPEAT standards)
- Ensure that Energy Star® features are enabled on 100 percent of computers and monitors or to the maximum degree based on mission needs
- Have policies and programs to extend the useful lifetime of electronic equipment
- Ensure that all non-usable electronic products are reused, donated, sold, or recycled using environmentally sound management practices at end of life
- Choose either to become a partner in the Federal Electronics Challenge (FEC) or to implement an equivalent electronics stewardship program that addresses purchase, operation and maintenance, and end-of-life management strategies for electronic assets consistent with FEC recommended practices and guidelines.

7

April 3, 2008

To accomplish the above and align with EO 13423, DOE has developed the *U.S.*<u>Department of Energy Electronic Stewardship Plan</u>, which DOE sites can use as a model when developing their own plan.

<u>Implementing Electronics Stewardship at Department of Energy Facilities</u> is a guide to designing and implementing electronics stewardship programs at DOE-owned and contractor-operated facilities. The guide offers information on applicable regulatory requirements and interagency initiatives, electronics stewardship programs and practices, performance measures and reporting requirements, and resources and contacts for technical assistance.

As a party to the <u>"Electronic Assets Memorandum of Understanding, Promoting Sustainable Environmental Stewardship of Federal Electronic Assets</u>", DOE seeks to reduce the environmental impact of its electronic equipment purchase, use, and disposal through continuous improvements to the acquisition, design, specifications, material choices, use of new electronic equipment, and the reuse, demanufacturing, and recycling of surplus electronic equipment.

<u>DOE's Electronic Stewardship website</u> is a centralized source of information for DOE sites on the purchase, maintenance, and disposition of electronic equipment.

For **sustainable buildings**, EO 13423 directs each agency and its facilities to meet or exceed statutory goals and to address each of the five "Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings" in the "Memorandum of Understanding" signed by DOE. The five principles are: employing integrated design principles, optimizing energy performance, protecting and conserving water, enhancing indoor environmental quality, and reducing the environmental impact of the building materials. These requirements apply to construction of new Federal buildings; new, renegotiation, or extension of leases for Federal occupancy; or major renovation projects. To address the principles, DOE follows the *Whole Building Design Approach*.

By the end of 2015, agencies shall meet the 15 percent goal in EO 13423 section 2(f)(ii) for incorporating the sustainable practices in the *Guiding Principles* into their Federal capital asset building inventory. The 15 percent goal for existing buildings applies to an agency's full building inventory as it exists in FY2015, including any new buildings brought on line and excluding any unneeded buildings disposed of or sold prior to 2015. The Interagency Sustainability Working Group assists all Federal agencies as well as DOE sites toward meeting these goals.

One of the <u>guiding principles of high performance and sustainable buildings</u> is to reduce the environmental impact of materials, especially giving preference to

 Biobased Content - For USDA-designated products, use products meeting or exceeding USDA's biobased content recommendations. For other products, use biobased products made from rapidly renewable resources and certified sustainable wood products.

- Ozone Depleting Compounds Eliminate the use of ozone depleting compounds during and after construction where alternative environmentally preferable products are available, consistent with either the Montreal Protocol and Title VI of the Clean Air Act Amendments of 1990, or equivalent overall air quality benefits that take into account life cycle impacts.
- Recycled Content For EPA-designated products, use products meeting or
  exceeding EPA's recycled content recommendations. For other products, use
  materials with recycled content such that the sum of post-consumer recycled content
  plus one-half of the pre-consumer content constitutes at least 10% of the total
  materials in the product. For example to specify recycled content in non-designated
  products, specify the product contain at least 7% post-consumer recycled content
  and 3% pre-consumer recycled content for a total of 10% recycled content.

## 2.1.7 Applicability

The DOE Environmentally Preferable Purchasing Program applies to:

**Government-Owned, Government-Operated Facilities** – Acts of Congress (RCRA, FSRIA, and EPAct 2005) and EO 13423 direct Federal agencies to implement the sustainable practices defined in the respective documents.

Government-Owned, Contractor-Operated Facilities - Most DOE National Laboratories and other DOE-owned facilities are managed by contractors. DOE's facility management contractors procure many products with designated attributes in the course of performing their duties for the Department. For this reason, DOE facility management contractors are included in the DOE Environmentally Preferable Purchasing Program and must be aware of and comply with these requirements.

<u>DEAR 970.2304</u> contains the environmental policy statement for facility management contractors. Contracting officers should insert the following clause (970.5223.2) in contracts for the management of DOE facilities, including national laboratories:

- (a) In the performance of this contract, the Contractor shall comply with the requirements of Executive Order 13423 and the U.S. Department of Energy (DOE) Affirmative Procurement Program Guidance. This guidance includes requirements concerning environmentally preferable products and services, recycled content products and biobased products. This guidance is available on the Internet.
- (b) In complying with the requirements of paragraph (a) of this clause, the Contractor shall coordinate its activities with the DOE Recycling Coordinator. Reports required by paragraph (c) of this clause shall be submitted through the DOE Recycling Coordinator.
- (c) The Contractor shall prepare and submit reports, at the end of the Federal fiscal year, on matters related to the acquisition of items designated in EPA's

Comprehensive Procurement Guidelines that Federal agencies and their Contractors are to procure with recovered/recycled content. [Now that FAR clauses include biobased content, parallel DEAR clauses are being developed. FAR clauses and then DEAR clauses are also being developed for EPEAT registered products. When approved they too should be included in contracts for the management of DOE facilities.]

(d) If the Contractor subcontracts a significant portion of the operation of the Government facility which includes the acquisition of items designated in EPA's Comprehensive Procurement Guidelines, the subcontract shall contain a clause substantially the same as this clause. The EPA Comprehensive Procurement Guidelines identify products which Federal agencies and their Contractors are to procure with recycled content pursuant to 40 CFR 247. Examples of such a subcontract would be operation of the facility supply function, construction or remodeling at the facility, or maintenance of the facility motor vehicle fleet. In situations in which the facility management contractor can reasonably determine the amount of products with recovered/recycled content to be acquired under the subcontract, the facility management contractor is not required to flow down the reporting requirement of this clause. Instead, the facility management contractor may include such quantities in its own report and include an agreement in the subcontract that such products will be acquired with recovered/recycled content and that the subcontractor will advise if it is unable to procure such products with recovered/recycled content because the product is not available (i) competitively within a reasonable time, (ii) at a reasonable price, or, (iii) within the performance requirements. If reports are required of the subcontractor, such reports shall be submitted to the facility management contractor. The reports may be submitted at the conclusion of the subcontract term provided that the subcontract delivery term is not multi-year in nature. If the delivery term is multi-year, the subcontractor shall report its accomplishments for each Federal fiscal year in a manner and at a time or times acceptable to both parties (DEAR 970.5223-2).

**DOE Subcontracts** - The DEAR clause cited above provides for flow down of procurement requirements to subcontractors of the facility management. To facilitate the flow down, the management contractor should include the designated attributes in its Request for Proposal specifications for construction, remodeling, or other service subcontracts. A worksheet should be submitted by the prospective subcontractor to indicate 1) which products they will acquire with which environmental attributes and 2) whether any products designated for purchase by Congressional laws are justified exceptions. In addition to flowing down the purchasing requirement, the subcontract should also flow down a reporting requirement to match that required of DOE.

**DOE Support Service Contracts Performed at a Federal Facility** - Contractors providing support services within a Government-owned or leased facility must comply with the provisions of EO 13423. The Federal Acquisition Regulation, FAR 23.705, requires the use of the clause at <u>FAR 52.223-10</u>, Waste Reduction Program, in such circumstances.

If the contractor is expected to acquire significant quantities of designated products, the clause at <a href="DEAR 970.5204-39">DEAR 970.5204-39</a>, Acquisition and Use of Environmentally Preferable Products and Services, should be used. This clause will make the contractor part of the DOE Environmentally Preferable Purchasing Program and require the contractor to report its acquisitions of products with designated attributes as part of the program.

## 2.1.8 Roles and Responsibilities

EPP roles and responsibilities are designated in the various Congressional laws and EO 13423. In particular, EO 13423, *Strengthening Federal Environmental, Energy, and Transportation Management*, describes the roles of Heads of Agencies.

#### 2.1.8.1 Agency Official for Executive Order 13423

Section 3 of EO 13423 requires the designation of a Senior Agency Official who is responsible for ensuring agency implementation of the executive order. At DOE, the Assistant Secretary of Energy Efficiency and Renewable Energy has been designated as the Agency Official for EO 13423. The Senior Agency Official serves on the Steering Committee for Strengthening Federal Environmental, Energy, and Transportation Management. The Official's duties are to "implement with[in] the agency sustainable practices for (i) energy efficiency, greenhouse gas emissions avoidance or reduction, and petroleum products use reduction, (ii) renewable energy, including bioenergy, (iii) water conservation, (iv) acquisition, (v) pollution and waste prevention and recycling, (vi) reduction or elimination of acquisition and use of toxic or hazardous chemicals, (vii) high performance construction, lease, operation, and maintenance of buildings, (viii) vehicle fleet management, and (ix) electronic equipment management" and to "implement with[in] the agency Environmental Management Systems at all appropriate organizational levels."

#### 2.1.8.2 DOE Roles and Responsibilities

The DOE <u>Acquisition Guide (Chapter 23)</u> identifies the organizations within DOE responsible for coordinating implementation:

Office of Environmental Policy and Assistance (HS-20) - The Office of Environmental Policy and Assistance has lead responsibility for management of Affirmative Procurement, which includes

- Biobased USDA designated biobased material content products (management and performance reporting)
- Electronic EPEAT registered products (management and performance reporting)
- Non-Ozone Depleting DOE and EPA denoted acceptable substitutes (management)
- Recycled EPA designated recovered material content products (management and performance reporting)
- Other environmentally preferable products (management)

April 3, 2008

The Office of Environmental Policy and Assistance also has lead responsibility for coordinating the implementation of the environmental aspects of EO 13423.

Office of Energy Efficiency and Renewable Energy (EERE)/Federal Energy Management Program (FEMP) - The Federal Energy Management Program in the Office of Energy Efficiency and Renewable Energy has lead responsibility for

- Alternative Fuels/Vehicles
- Energy Savings Performance Contracts
- Energy/Water Efficient Products
- Sustainable Buildings

Office of Procurement and Assistance Management (MA) - The Office of Procurement and Assistance Management and the entire DOE acquisition community assist program elements to successfully accomplish the EPP programs. The Office of Procurement and Assistant Management defines roles and responsibilities for the procurement community, provides program support at the Headquarters level by developing EPP related guidance and acquisition regulations, offers training, and works with program and procurement officials to increase awareness of and compliance with EPP requirements.

**Preferred Procurement Partnership** - Because the responsibility for implementing the various aspects of the Department's EPP Program is spread among multiple offices at DOE Headquarters, staff in each of the offices responsible for a particular preferred product initiated an informal Preferred Procurement Partnership to leverage common efforts and give DOE sites consistent sources of information, such as technology transfer via teleconferences, on-line performance tracking and reporting tools, EPP website, pollution prevention awards program, identifying purchasers and users (green teams), and technical support for problem solving.

**Pollution Prevention Coordinator** - EO 13423 Instructions require that Federal agencies designate "Recycling Coordinators" for their facilities. Over the years, the role of the "Recycling Coordinator" has changed. The DOE designation is now "Pollution Prevention Coordinator." The Pollution Prevention Coordinator manages the Pollution Prevention Program and works to embed pollution prevention practices in the site's Environmental Management System, one of which is environmentally preferable purchasing.

Environmentally Preferable Purchasing Coordinator – The Environmentally Preferable Purchasing Coordinator is usually in the Environment, Safety, and Health organization. This person is responsible for overseeing the EPP Program, helping embed environmentally preferable purchasing in the site's Environmental Management System, facilitating the transition at the site to more environmental materials and methods, and promoting the purchase of environmentally preferable products to staff.

**Green Acquisition Advocate** – The Green Acquisition Advocate is generally in the Procurement organization. In May 2000, DOE established the position of Green

Acquisition Advocate (Acquisition Letter AL-2000-03, updated by AL-2002-05, and replaced by Chapter 23 of the <u>Acquisition Guide</u>). Each DOE Contracting Activity is to designate an employee to be its Green Acquisition Advocate (GAA), and DOE's facility management contractors are encouraged to appoint their own Green Acquisition Advocates as well. The GAA works to embed environmentally preferable purchasing in the site's purchasing and tracking systems and site-specific acquisition contracts and coordinates their work with the site Environmentally Preferable Purchasing Coordinator.

# 2.1.9 Embedding in DOE Site Systems

Environmentally preferable purchasing should become standard practice among all purchasing entities in any organization—be it purchasing card purchases, purchase requests, purchasing agreements, or contractual purchases. DOE sites should embed the principles and practices of environmentally preferable purchasing in their Environmental Management System as well as all purchasing systems.

#### 2.1.9.1 Environmental Management System

To improve environmental performance in the Government and ensure that Federal agencies integrate environmental accountability into the planning and conduct of operations, the President mandated in EO 13423, *Strengthening Federal Environmental, Energy, and Transportation Management*, that all appropriate Federal facilities maintain environmental management systems (EMS). An EMS is a systematic and structured approach for addressing the environmental consequences of an organization's activities, products and services, using a continuous cycle of planning, implementing, evaluating and improving processes, and actions undertaken to achieve environmental goals. Pursuant to executive and DOE orders, EMSes have been implemented at all appropriate facilities within the Department.

The first step toward making EPP standard practice is to embed it in the EMS. DOE Order 450.1A, *Environmental Protection Program* stipulates that an EMS provide for pollution prevention in the planning, execution and evaluation of site operations and activities. The Order lays out specific pollution prevention and sustainable environmental stewardship goals (including an EPP goal) that are to be addressed in the site EMS. The Order also provides a comprehensive list of strategies for achieving the EPP goal through inclusion in the site EMS as objectives and measurable targets.

For further details on including EPP in your site's EMS, see EPA's <u>Integrating Green Purchasing into Your Environmental Management System</u>, and DOE Guide 450.1-5, <u>Implementation Guide for Integrating Pollution Prevention into Environmental Management Systems</u>.

#### 2.1.9.2 Purchasing Systems

The second step toward making EPP purchasing standard practice is to embed it in your site purchasing systems. Begin by identifying the systems used for specifying and buying products:

- Credit card purchases Purchasing Agreements
- Purchase requests Purchase Requisition System
- Statements of Work/Requests for Proposal Service and Construction Contracts

Build the EPP specifications and reporting requirements into each of these systems.

**For credit card purchases**, establish purchasing agreements with suppliers from whom your staff are allowed to purchase. Such purchasing agreements not only give you best customer pricing but give you the opportunity to specify which environmental attributes certain products must contain if your staff are to purchase them.

**For purchase requests** (purchases of a value beyond that allowed with a credit card), build into your Purchase Requisition System automatic checks to remind Purchasing Agents of environmental attributes that are desired and those that are required.

Look at your site's upcoming service contracts. If any of them involve products or construction materials, include specifications in your Statements of Work, Requests for Proposal, and resulting contracts that require environmental attributes, especially those required by Congressional laws (biobased/recycled content, energy/water efficient, alternative fuels/vehicles, non-ozone depleting, electronic equipment, building materials and equipment).

The types of service contracts that might be affected are:

- Cleaning/Janitorial products or service
- Construction services
- Equipment maintenance
- Electronics assets services
- Facility maintenance
- Food service
- Grounds products or service
- Laundry service
- Office product supplies
- Vehicle maintenance

# 2.1.10 Specifications Review

An integral part of a preference program for more environmentally preferable products is removing specifications that hinder the purchase of those products. DOE program elements are responsible for reviewing and revising specifications, product descriptions, and standards during the acquisition planning stage to enhance DOE's procurement of

April 3, 2008

environmentally preferable products. Standards or specifications, unrelated to performance, that present barriers to the procurement of environmentally preferable products should be revised or eliminated when reviewing or drafting procurement specifications.

# 2.1.11 Life-Cycle Cost Analysis

EO 13423 and Section D(3) of the Instructions for Implementing EO 13423 require Federal agencies to use life-cycle cost analyses, wherever feasible and appropriate, to assist in the selection of products and services. DOE considers the entire life cycle of a product when deciding which product to purchase, using life-cycle cost to select products. Because the full cost of products with non-environmental attributes often does not hit the budget until long after the product has been purchased, life-cycle cost analysis gives preference to products and materials with more environmental attributes. The product's price is only one part of what the product will truly cost your organization. The cost of staff health while using or working near the product, waste disposal costs, etc. all need to be calculated to determine the actual price.

Guidance on measuring life-cycle costs is provided in 10 CFR 436, Subpart A. Additional guidance on measuring cost-effectiveness is provided in 10 CFR 436.18(a), (b), and (c), 436.20, and 436.21. See also the DOE directives on the entire life cycle of a product and life-cycle cost analysis. Several life-cycle analysis tools are available. Two of particular importance for EPP are BEES (Building for Environmental and Economic Sustainability) and EPEAT (Electronic Product Environmental Assessment Tool).

# 2.1.12 Federal, Mandatory, and Preferred Supply Sources

To speed the process of identifying products for your Preference Program, use Federal supply sources. Thousands of environmentally preferable products are available to procuring agencies and their contractors through established Federal supply sources, such as the

- General Services Administration
- Defense Energy Support Center
- Defense Logistics Agency
- Government Printing Office
- Javits-Wagner-O'Day (JWOD) Program
- UNICOR Federal Prison Industries

Buying the designated environmentally preferable products from these sources offers the following advantages:

- Products have been competitively bid.
- Products with designated attributes (biobased/recycled content, energy/water efficient, alternative fuels/vehicles, non-ozone depleting substances) meet the same

performance standards as those established for products without the designated attributes.

 EPA and USDA designated products purchased through the General Services Administration (GSA), Defense Logistics Agency (DLA), and Government Printing Office (GPO) do not have to be tracked and reported by DOE because GSA, DLA, and GPO report the totals of products purchased from them.

Federal supply sources attempt to provide independent estimation, certification, and verification of designated products. However, in the end, it is the responsibility of the purchaser to verify the products comply with the purchasing requirements.

When purchasing designated products, DOE sites are to first consider mandatory (Javits-Wagner-O'Day and Federal Prison Industries' UNICOR programs) and preferred (small businesses, including Small Disadvantaged, Women-Owned, Native American, Alaska Native, Historically Underutilized Businesses, and Service Disabled Veterans) sources. If these sources do not offer the designated products or services sought, DOE sites shall obtain such products and services from other sources.

# 2.2 Promotion Program

DOE has a program to promote environmentally preferable products that includes:

- Pilot projects
- Technical support hot line for pilot projects and problem solving
- <u>Technology transfer</u> between DOE sites to share success stories and lessons learned
- <u>Teleconferences</u> held quarterly (4<sup>th</sup> Thursday in January, April, July, and October) for all DOE staff involved in any aspect of specifying and purchasing products
- Training for users, specifiers, and purchasers
- Website that offers readily accessible information

DOE recognizes that transitioning to new products can be difficult. Product users may have valid concerns about whether the new product will meet regulations, cost, and performance requirements. DOE promotes the following practices when transitioning to new products:

- Involve the users of the product in the decision-making process
- Conduct all required paper evaluations to ensure the product meets state air emission and waste regulations, ASTM, equipment warranty specifications, etc.
- When feasible, give users samples of the product to test

# 2.3 Estimation, Certification, and Verification Program

The Resource Conservation and Recovery Act (RCRA Section 6002) requires procuring agencies to obtain estimations and certifications of the recycled content in the products to be supplied under a contract and to verify those certifications. DOE recommends the following procedures for fulfilling estimation, certification, and verification requirements.

- Estimation The statement of work or product description should specify the
  recovered materials content ranges for EPA-designated products. Vendors
  responding to bids for EPA-designated products must meet the minimum specified
  recovered material content level. For example, FAR 52.223-9 provides a clause to
  be used in contracts which requires the contractor to report on the actual recycled
  content of the product delivered under the contract.
- Certification Vendors are responsible for 1) providing written certification to the
  contracting officer that their products meet the minimum recovered material content
  levels, 2) maintaining copies of certification documents, and 3) producing copies of
  the written certification upon request by DOE or its contractors. For example, FAR
  52.223-4 provides a certification to be used by the offeror to certify that they will
  deliver product with the EPA designated minimum recycled content.
- Verification DOE and its contractors will verify estimates and certifications through their normal quality control assurance procedures, when the scope or volume of a contract is significant.

.

# 2.4 Annual Review, Monitoring/Tracking, and Reporting Program

The Department's reporting requirements for EPP set the stage for a review of the EPP Program. The EPP report results tell a site what successes they have to build on and identify the areas that need more effort. Before a review can occur, however, sites must establish systems for monitoring, tracking, and reporting their EPP purchases.

# 2.4.1 Monitoring/Tracking

Because of DOE's reporting requirement, Headquarters procurement offices, DOE-managed sites, and contractor-operated sites need to establish systems to monitor and track the products for which DOE must report purchases.

Tracking the purchase of environmental products is the most difficult part of the job. Tracking is complex because products are purchased using a variety of purchasing systems: purchasing cards, purchase requests, purchasing agreements, sub-contracts, etc. Data must be gathered from each of these systems.

To gather data from a sub-contract, the requirement for the sub-contractor to report (what to report and due date) needs to be built into the contract and purchase agreement. According to DEAR 970.2304-2 and 970.5223-2, the requirement to purchase products with recycled content, for example, should flow down in sub-contracts, such as construction or remodeling, maintenance of a motor vehicle fleet, etc.

To gather data from purchasing card and purchase request purchases, DOE sites have two possibilities: suppliers can track for you or you can track using your organization's purchasing system software. Both have advantages and disadvantages.

- When suppliers gather the purchasing data, they will capture accurate data but will
  not be able to capture the CAP: the cost, availability, and performance justified
  exceptions for why your staff were not able to purchase certain products with the
  specified attributes. Also, small businesses are sometimes challenged to track and
  report each and every product purchased.
- When your organization gathers the purchasing data, you usually can capture the CAP but the data reported may be unreliable. Typically when the purchaser tracks, the system relies on the person (perhaps hundreds of purchase card holders who are not purchasing specialists) to reliably denote whether the product they purchased contained the specified attribute or not.

## 2.4.2 Reporting

Once you have tracked your organization's purchases, reporting the data is easy. Although giving preference to designated products is required in contracts and individual purchases, reporting is only required for some products. Reporting requirements for purchasing are (per the Instructions for EO 13423) the same as the existing reporting procedures in place January 24, 2007. The overview of the reporting below reflects the four main locations where DOE sites report their activities and the variety of reports in which DOE-HQ uses the data to meet our reporting requirements.

#### **Overview of Green Purchasing Reporting Requirements**

DOE Site Data Input	Annual Due Dates	Various Reporting Destinations
EPP Data Website	Dec	OFEE EPP Report to Congress
http://www.hss.energy.gov/pp/data	Sites to DOE	
entry.html	Jan & Jul	OMB Env Scorecard Report
	DOE to OFEE	
P2 Data Website	Dec	OFEE EPP Report to Congress
http://www.hss.energy.gov/pp/data	Sites to DOE	DOE & Sustainable
entry.html		Environmental Stewardship Goals
		Report (DOE Order 450.1A)
Energy	Dec	FEMP Report to Congress
http://www1.eere.energy.gov/femp/	Sites to DOE FEMP	
about/reporting guidance.html	Jan & Jul	OMB Energy Scorecard Report
	DOE to FEMP	
FAST https://fastweb.inel.gov/	Jan & Jul	OMB Transportation Scorecard
	DOE to FEMP	Report
Environmental Management	Dec	EPA EMS Report
System Implementation	Sites to DOE	
http://www.epa.gov/ems/	Jan & Jul	OMB Env Scorecard Report
	DOE to OFEE	
Federal Electronic Challenge	Jan	FEC Report
http://www.federalelectronicschalle	Sites to DOE&FEC	
nge.net/	Jan & Jul	OMB Env Scorecard Report
	DOE to OFEE	
Federal Bldgs Database	Any time by end of	OMB Env Scorecard Report
www.eere.energy.gov/femp/highpe	year	
rformance/index.cfm	Sites to FEMP	

DOE - U.S. Department of Energy

EMS – Environmental Management System

EPP - Environmentally Preferable Purchasing

FAST - Federal Automotive Statistical Tool

FED - Federal Electronics Challenge

FEMP - Federal Energy Management Program

OFEE - Office of the Federal Environmental Executive

OMB – Office of Management

P2 - Pollution Prevention Program

# 2.4.2.1 Office of Management and Budget Scorecard Reports

The Office of Management and Budget (OMB) established a scorecard system to assess agency performance in implementing statutory and executive order requirements on environmental stewardship, energy management, and transportation/fleet management. DOE reporting requirements have been aligned to feed the data collected into the OMB Scorecard reports, which are

- Environmental Stewardship
- Energy Management

Transportation/Fleet Management

# 2.4.2.2 Office of the Federal Environmental Executive Environmentally Preferable Purchasing Report to Congress

DOE has reporting requirements beyond the Scorecard data. Federal agencies are required to supply purchasing, waste reduction, and recycling data to the Office of the Federal Environmental Executive and OMB. To facilitate compliance with this annual reporting requirement, DOE has developed the web based <a href="Environmentally Preferable Purchasing Reporting System">Environmentally Preferable Purchasing Reporting System</a>. The system is open for annual reporting October-December. A password is required for data entry. For questions, contact:

- Reporting Donald Lentzen, E-mail donald.lentzen@hq.doe.gov or Tel. 202-586-7428
- Passwords and website logistics E-mail p2support@hq.doe.gov

The data requested for the annual EPP report are:

**Electronics Stewardship** (Executive Order 13423, DOE Order 450.1A)

EO 13423 directs each agency to develop and submit a plan to implement electronics stewardship practices for all eligible owned or leased electronic equipment in support of the goals in section 2(h) of EO 13423. The Department's plan is available at http://www.hss.energy.gov/pp/DOE\_ElectronicsStewardship\_FinalPlan\_72007.pdf.

In addition, the present annual reporting requirements on the DOE EPP reporting website for electronic equipment purchases cover <u>EPEAT-registered products</u>:

Acquisition and Purchase information requested includes:

- The total dollar value spent on EPEAT-registered desktop computers
- The total dollar value spent on EPEAT-registered computer monitors
- The total dollar value spent on EPEAT-registered notebooks

Other reporting parameters include Operations and Maintenance information and details on your site's End of Life Management. Link to http://www.federalelectronicschallenge.net/report.htm

**Biobased Content Products** (Farm Security and Rural Investment Act of 2002 Section 9002, EO 13423, DOE Order 450.1A)

The reporting requirements for biobased content purchases cover<u>USDA designated</u> products:

- Type of biobased product (general purpose cleaner, lubricant, etc.)
- Dollar total spent on each type of biobased product
- Supplier of each type of biobased product (GSA, DLA, commercial source, etc.)

**Recycled content products** (Resource Conservation and Recovery Act of 1976Section 6002, EO 13423, DOE Order 450.1A)
The reporting requirements for recycled content purchases cover <u>EPA designated products</u>:

- The total dollar value spent on the designated products (both those purchased with and without the recycled content)
- The total dollar value spent on the designated products containing recycled content and the percent success rate
- The total dollar value spent on the designated products that did NOT contain recycled content but that were justified exceptions
- Reasons for inability to purchase products without recycled content
- Plan of action for overcoming those obstacles

**Biobased and recycled content products** require exemption reporting. If the products cannot be purchased with the designated attributes, the purchaser is required to document the reason. The requirement to purchase products designated by EPA with recycled content and designated by USDA with biobased content applies to all purchases, including those at or below the micropurchase threshold (\$3000), unless one or more of the following justifications apply:

- Product is not available competitively
- Product is not available within a reasonable period of time
- Product fails to meet the performance standards set forth in applicable specifications or fails to meet reasonable performance standards
- Product is only available at an unreasonable price

A shorthand form of the above is the "CAP: cost, availability, performance." Written justification is required when a product containing the specified attribute was not purchased. DOE has a <u>sample form</u> that can be used to satisfy the requirement for written justification. This form, or a site-specific version, must be completed for all purchases of EPA or USDA designated products where the designated content was not obtained. All such forms should be signed by the Green Acquisition Advocate for DOE Contracting Activities. In addition, justification forms should be kept on file for a period of 3 years and be ready for inspection during an EMS audit.

# 2.4.2.3 U.S. Department of Energy Pollution Prevention and Sustainable Environmental Stewardship Goals Report

<u>DOE Order 450.1A</u> requires annual reports on each DOE site's progress toward strengthening Federal environmental, energy, and transportation management. The report covers waste prevention, reduction of environmental releases, environmental stewardship in program planning and operational design, post-consumer material recycling, and environmentally preferable purchasing.

The reporting requirements for the environmentally preferable purchasing component (beyond those requested in the annual EPP report) are whether the site has:

- Established environmentally preferable purchasing objectives and measurable targets in the site EMS
- Identified resources needed to implement the environmentally preferable purchasing goal and site-specific objectives and targets in site annual budgetary processes
- Participated in voluntary environmental partnership programs (for example, Federal Electronics Challenge and WasteWise partners) where there is a programmatic benefit from doing so (community outreach, technology transfer, regulatory incentives, etc.)
- Received any awards for environmentally preferable purchasing
- Operated a vehicle fleet that is the most environmentally preferable possible while meeting performance, cost effectiveness, and regulatory demands:
  - Used <u>American Petroleum Institute</u> rated (identified by "donut" symbol and "starburst" certification) re-refined oil, retread truck tires, antifreeze/engine coolant recyclers, water recycling/reclamation vehicle wash facilities, and biobased lubricants, fuels, and degreasers/cleaners
  - Used alternative fuel (clean air) vehicles

#### 2.4.2.4 Annual Federal Energy Management Program Reports

The Federal Energy Management Program (FEMP) is responsible for energy and water efficient products, construction materials as part of sustainable design, and alternative fuels and vehicles. Because FEMP manages the Federal program, the reporting requirements affect all Federal agencies, including all DOE sites.

Alternative fuels/vehicles (Energy Policy Act of 2005, EO 13423)

The reporting requirements for alternative fuels/vehicles require reporting to Congress with a copy to DOE headquarters. DOE consolidates the individual agency reports into an annual report to the President. DOE vehicle fleets submit their report to DOE-HQ from their individual sites using the Federal Automotive Statistical Tool (FAST).

Energy and water efficient products (Energy Policy Act of 2005, EO 13423) The reporting requirements for energy and water efficient products do not require reporting of purchases. Instead, agencies are required to track and report to Congress and the President their progress toward meeting energy and water reduction goals. Purchasing energy/water efficient and renewable energy products is one way agencies can help meet these goals. DOE sites as well as all Federal agencies submit their data to DOE's Federal Energy Management Program for the Annual Report to Congress on Federal Government Energy Management and Conservation Programs.

Construction materials (sustainable design) (Energy Policy Act of 2005, EO 13423) The reporting requirements for construction materials as part of sustainable design are twofold. Specific construction materials designated to contain biobased and/or recycled content are reported on the DOE EPP Reporting website (see Section 2.4.2.2 above). In addition, one of the <u>guiding principles of high performance and sustainable buildings</u> is to reduce the environmental impact of materials, especially through the use of biobased and recycled content materials and substitutes for ozone-depleting substances. Such materials should be included in the documentation for LEED certification.

#### 2.4.2.5 Other

Some designated materials are required but have no reporting requirements.

**Non-ozone depleting substances** (Clean Air Act Title VI, EO 13423) Non-ozone depleting substances require no reporting on progress toward meeting requirements but sites must maximize the use of safe alternatives to ozone depleting substances as approved by EPA's Significant New Alternatives Policy (SNAP) program.

#### 2.5 Reviews and Audits

As with other Federal programs, DOE's EPP Program is open to internal and external reviews and audits.

# 2.5.1 Environmentally Preferable Purchasing Program Audit

Audits of DOE site Environmentally Preferable Purchasing Programs should occur as part of the EMS audit since all goals of EO 13423 are to be included in each site's EMS. One of the EO 13423 goals is the

acquisitions of goods and services: (i) use of sustainable environmental practices, including acquisition of biobased, environmentally preferable, energy-efficient, water-

efficient, and recycled-content products, and (ii) use of paper of at least 30 percent post-consumer fiber content;

This means each site's Environmentally Preferable Purchasing Program should be integrated into the EMS and audited along with the other EMS components. For declaration of conformance, the EMS is to have a formal audit by a qualified party outside the control or scope of the EMS. Once conformance has been declared, the EMS is to be audited at least every 3 years from the date of the initial declaration (see Sections C and D of Part II of EO 13423 Instructions).

## 2.5.2 RCRA Compliance Inspections

EPA inspects Federal agencies for compliance in purchasing recycled content products as part of their RCRA audits (*Guidance on Conducting Inspections of Federal Facilities for Compliance with Section 6002 of the Resource Conservation and Recovery Act*).

In 1999, EPA began conducting inspections of DOE facilities to evaluate compliance with Section 6002, specifically, the procurement of Comprehensive Procurement Guideline products with recycled content. The inspections have continued over the years. DOE sites may prepare for these inspections by completing the Facilities Questionnaire contained in the EPA Inspection Guidance. DOE sites should also revise their internal environmental compliance assessment programs to include RCRA Section 6002 compliance review protocols.

## 2.5.3 Agency Internal Review

Section 3 of EO 13423 directs agency heads to establish a program for environmental compliance review and audit. This is an internal review and part of the continual improvement process of EMS of which the Environmentally Preferable Purchasing Program is a part per EO 13423.

## 2.6 Awards

DOE has a Pollution Prevention Awards Program to recognize successful and innovative activities in the following categories:

- Environmentally Preferable (Green) Purchasing
- Electronics Stewardship
- Environmental Management Systems
- Alternative fuels and fuel conservation
- Reuse and Recycling
- Sustainable Design/Green Buildings
- Waste/Pollution Prevention

A White House Closing the Circle Awards Program for all Federal agencies recognizes outstanding achievements in the same areas.

Nominations for these awards should be submitted on the <u>Pollution Prevention Awards</u> <u>website</u>. The website is open for nominations from October-December. Instructions concerning the awards process are posted on the awards website.

The DOE Green Purchasing award criteria are the same as the Closing the Circle award criteria. To be considered for the Green Purchasing Award, the organization must have:

- A robust program for purchasing recycled products as well as either biobased products or other environmentally preferable products, especially best examples of acquiring, using, or validating products or services that have a reduced impact on human health and the environment when compared with competing products or services that serve the same purpose
- Outstanding improvement to a process that resulted in significant monetary savings and benefit to the environment or
- Product testing that led to the approval and use of environmentally preferable products or services.

For Federal Electronics Challenge Partners, DOE encourages sites to also submit nominations of your electronic equipment initiatives and programs for <u>FEC awards</u> as well as the DOE/Closing the Circle awards. The FEC awards program annually recognizes Partners at one of three levels that correspond to the number of life-cycle phases they have accomplished. Each phase — acquisition and procurement, operation and maintenance, end-of-life management — has established criteria. FEC Partners satisfying one, two, or three of the phase criteria earn the Bronze, Silver, or Gold award, respectively.

For WasteWise Partners, DOE encourages you to also submit nominations of your waste prevention, recycling, and purchase of recycled products for <u>WasteWise awards</u> as well as the DOE/Closing the Circle awards.

Nominations of energy and water efficiency should be submitted as <u>FEMP awards</u>.

# 2.7 Checklist for Successful Site EPP Programs

Successful site programs have energetic management and staff support. Without both, it is difficult to transition to new products. Once both management and staff are on board, other areas of importance for a successful site program include:

• Ensuring environmentally preferable purchasing requirements are included in the Environmental Management System and all purchasing systems: purchase card,

purchasing agreements, purchase request system, statements of work, requests for proposal, contracts and sub-contracts

- Establishing an effective working partnership between users, specifiers, program and acquisition staff
- Establishing an effective working partnership with vendors of environmentally preferable products, giving preference to mandatory and preferred sources unless those sources are unable to provide the designated product
- Training all staff
- Tracking site progress toward meeting DOE's environmentally preferable procurement goals
- Using available product evaluation tools, such as BEES and EPEAT
- Rewarding and sharing site successes or take corrective action, as necessary
- Reporting annually on site progress
- Being prepared for and passing EMS audits, including audit of the EPP Program

# 3.0 Acronyms

BEES Building for Environmental and Economic Sustainability

CFR Code of Federal Regulations

CPG Comprehensive Procurement Guidelines

DEAR Department of Energy Acquisition Regulation

DLA Defense Logistics Agency

DOE Department of Energy

EERE Office of Energy Efficiency and Renewable Energy

EMS Environmental Management System

EO Executive Order

EPA Environmental Protection Agency

EPEAT Electronic Product Environmental Assessment Tool

EPP Environmentally Preferable Purchasing

FAR Federal Acquisition Regulation

FAST Federal Automated Statistical Tool

FEC Federal Electronics Challenge

FEMP Federal Energy Management Program

FSRIA Farm Security and Rural Investment Act of 2002 FY Fiscal Year (October 1 through September 30)

GAA Green Acquisition Advocate GPO Government Printing Office

GSA General Services Administration

HS Office of Nuclear Safety and Environmental Assistance

JWOD Javits-Wagner-O'Day

MA Office of Procurement and Assistance Management

MOU Memorandum of Understanding

OFEE Office of the Federal Environmental Executive

OMB Office of Management and Budget

RCRA Resource Conservation and Recovery Act of 1976

USDA U.S. Department of Agriculture

# 4.0 Glossary of Terms

**Acquisition** -- acquiring of supplies and services as defined in Part 2 the Federal Acquisition Regulation (EO 13423 Instructions)

**Affirmative Procurement Program** -- program which ensures that products composed of recovered materials will be purchased to the maximum extent practicable, consistent with Federal law and procurement regulations (RCRA Section 6002)

**Biobased Product** -- product "determined by the Secretary [of the U.S. Department of Agriculture] to be a commercial or industrial product (other than food or feed) that is composed, in whole or in significant part, of biological products or renewable domestic agricultural materials (including plant, animal, and marine materials) or forestry materials" (FSRIA Section 9002)

**Certification** -- written documentation provided by offerors/bidders/vendors certifying that the percentage of recovered materials contained in products or to be used in the performance of the contract is at least the amount required by applicable specifications or other contractual requirements. Certification on multi-component or multi-material products should verify the percentage of post-consumer waste and recycled material contained in the major constituents of the product (EPA Guidelines).

Comprehensive Procurement Guidelines (CPG) -- regulations issued by the U.S. Environmental Protection Agency pursuant to section 6002 of the Resource Conservation and Recovery Act which (1) identify products that are or can be produced with recovered materials and where procurement of such products will advance the objectives of RCRA; and (2) provide recommended practices for the procurement of such products (RCRA Section 6002, EPA Guidelines)

**Environmentally Preferable** -- products or services that have a lesser or reduced effect on human health and the environment when compared with competing products or services that serve the same purpose. This comparison may consider raw materials acquisition, production, manufacturing, packaging, distribution, reuse, operation, maintenance, or disposal of the product or service (EO 13423, FAR 23.703).

**Environmental Management System (EMS)** -- set of processes and practices that enable an organization to increase its operating efficiency, continually improve overall environmental performance and better manage and reduce its environmental impacts, including those environmental aspects related to energy and transportation functions. EMS implementation reflects accepted quality management principles based on the "Plan, Do, Check, Act," model found in the ISO 14001:2004(E) International Standard and using a standard process to identify and prioritize current activities, establish goals, implement plans to meet the goals, evaluate progress, and make improvements to ensure continual improvement (EO 13423 Instructions).

**Estimation** -- written documentation of the best quantitative determination made by vendors of the total percentage of recovered material contained in products to be supplied to the purchaser. Estimations should be based on historical or actual percentages of recovered materials in products sold in substantial quantities to the general public or on other factual basis. EPA's guidelines recommend that procuring agencies maintain records of these estimates for three years by product type, quantity purchased, and price paid (EPA Guidelines).

**Executive Agency or Agency** -- Executive agency as defined in section 105 of title 5, United States Code, excluding the Government Accountability Office (EO 13423)

**Federal Electronics Challenge** -- purchasing, use, and end-of-life management challenge issued for Federal facilities or agencies to purchase electronic assets in an environmentally sound manner, network with other agencies to improve current practices, and recognize individuals and organizations for their electronic stewardship efforts (Electronics MOU)

**Life-Cycle Cost** -- sum of the present values of capital costs, installation costs, operating costs, maintenance costs, and disposal costs over the lifetime of the project, product, or measure (EO 13423 Instructions)

**Post-Consumer Material** -- material or finished product that has served its intended use and has been diverted or recovered from waste destined for disposal, having completed its life as a consumer product. "Post-consumer material" is a part of the broader category of "recovered materials" (EPA Comprehensive Procurement Guidelines Glossary)

**Practicable** -- capable of being used consistent with: performance in accordance with applicable specifications; availability at a reasonable price; availability within a reasonable period of time; and maintenance of a satisfactory level of competition (EPA Guidelines)

**Pre-Consumer Material** -- materials generated in manufacturing and converting processes, such as manufacturing scrap and trimmings/cuttings, that did not reach the consumer for whose use they were intended, and have been diverted from the solid waste stream for the purposes of collection, recycling, and disposition (EPA Comprehensive Procurement Guidelines Glossary)

**Preference** -- means when two products or services are equal in performance characteristics and price, the Government, in making purchasing decisions, will favor the product that is more environmentally-sound or energy-efficient (DEAR 923.471)

**Preferred Purchasing** – considering attributes designated by Congress: biobased/recycled content, energy/water efficient, alternative fuels/vehicles, non-ozone depleting, and environmentally preferable (DOE terminology)

**Recovered Material** -- waste materials and by-products which have been recovered or diverted from solid waste including post-consumer material, but such term does not include those materials and by-products generated from, and commonly reused within, an original manufacturing process (FAR 23.402)

**Recycled Material** -- material that can be used in place of a raw or virgin material in manufacturing a product and consists of materials derived from post-consumer waste, industrial scrap, agricultural wastes, etc.--all of which can be used in the manufacture of new products (EPA Guidelines)

**Recycling** -- series of activities, including collection, separation, and processing, by which products or other materials are recovered from the solid waste stream for use in the form of raw materials in the manufacture of new products other than fuel for producing heat or power by combustion (FAR 23.703)

**Specification** -- clear and accurate description of the technical requirement for materials, products, or services which specifies the minimum requirement for quality and construction of materials and equipment necessary for an acceptable product. In general, specifications are in the form of written descriptions, drawings, prints, commercial designations, industry standards, and other descriptive references (EPA Guidelines).

- **U.S. Department of Agriculture Designated Product** -- product that is or can be made with biobased materials and is listed by USDA in a procurement guideline (FAR 23.402)
- **U.S. Environmental Protection Agency Designated Product** -- product that is or can be made with recovered materials and is listed by EPA in a procurement guideline (FAR 23.402)

**Verification** -- procedures used by procuring agencies to verify vendor estimates and certifications of the percentages of recovered material contained in the products supplied to them or to be used in the performance of a contract (EPA Guidelines)

**Virgin Material** -- raw material used in manufacturing that has been mined or harvested and has not yet become a product (EPA Guidelines)

## 5.0 Resources

CAA - Clean Air Act Title VI. Available at <a href="http://www.epa.gov/air/caa/title6.html">http://www.epa.gov/air/caa/title6.html</a>

DEAR – Department of Energy Acquisition Regulations. Available at http://management.energy.gov/DEAR970.pdf

EPAct 2005 – Energy Policy Act of 2005, January 4, 2005. Available at <a href="http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=109\_cong\_bills&docid=f:h6enr.txt.pdf">http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=109\_cong\_bills&docid=f:h6enr.txt.pdf</a>

EO 13423 - Executive Order 13423, "Strengthening Federal Environmental, Energy, and Transportation Management," January 26, 2007. Available at <a href="http://ofee.gov/eo/EO\_13423.pdf">http://ofee.gov/eo/EO\_13423.pdf</a>

EO 13423 Instructions – Instructions for Implementing Executive Order 13423, "Strengthening Federal Environmental, Energy, and Transportation Management," March 29, 2007. Available at <a href="http://ofee.gov/eo/eo13423\_instructions.pdf">http://ofee.gov/eo/eo13423\_instructions.pdf</a>

EPA Guidelines – U.S. Environmental Protection Agency. *Comprehensive Procurement Guidelines*, 40 CFR 247. Available at <a href="http://www.epa.gov/epaoswer/non-hw/procure/index.htm">http://www.epa.gov/epaoswer/non-hw/procure/index.htm</a>

FAR – Federal Acquisition Regulations. Available at <a href="http://www.ARNet.gov/far">http://www.ARNet.gov/far</a>

Electronics MOU – "Promoting Sustainable Environmental Stewardship of Federal Electronic Assets Memorandum of Understanding," November 15, 2004. Available at <a href="http://www.ofee.gov/finalmou.pdf">http://www.ofee.gov/finalmou.pdf</a>

FSRIA Section 9002 – Farm Security and Rural Investment Act of 2002. 16 USC 1671, et seq. Section 9002 available at <a href="http://www.biobased.oce.usda.gov/fb4p/files/TITLEIX.pdf">http://www.biobased.oce.usda.gov/fb4p/files/TITLEIX.pdf</a>

RCRA Section 6002 - Resource Conservation and Recovery Act of 1976, as amended (RCRA). 42 USC 6901, et seq. Section 6002 available at <a href="http://www.ornl.gov/adm/ornlp2/sec6002.htm">http://www.ornl.gov/adm/ornlp2/sec6002.htm</a>

WBDG - Whole Building Design Guide. Available at <a href="http://www.wbdg.org/">http://www.wbdg.org/</a>