

Environmental Purchasing

in the
National Park Service



A How-to Guide



**Developed by the
NPS Pacific West Region &
Northwest Procurement Institute, Inc.**



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ENVIRONMENTAL PURCHASING IN THE NATIONAL PARK SERVICE: A HOW-TO GUIDE

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ENVIRONMENTAL PURCHASING IN THE NATIONAL PARK SERVICE:

A HOW-TO GUIDE

1.0 INTRODUCTION

Environmental purchasing or “green” procurement¹ is a concept that melds procurement and environmental ethic into a sustainable purchasing strategy. Environmental purchasing encompasses a wide spectrum of activities, from purchasing recycled-content supplies to reducing the number of toxic chemicals purchased to minimizing energy consumption through acquisition of energy efficient technologies.

WHAT IS GREEN PROCUREMENT?

- A market-based mechanism to make environmental improvement through our purchases.
- Buying products and services that are/have:
 - Recycled content
 - Energy efficient
 - Less toxic
 - More durable and/or upgradeable
- Choosing to NOT buy a product or service!

In short, environmental purchasing encourages an individual to consider multiple environmental attributes of both products and services prior to purchase. This Guide is intended to introduce National Park Service (NPS) employees to the concepts of environmental purchasing and to provide the necessary tools to put environmental purchasing into practice.

1.1 Context for Environmental Purchasing

As the single largest employer and consumer of goods and services, the Federal government’s footprint is significant with economic, social and environmental impacts on local and regional communities where government facilities operate and function. “Greening the Government” is a phrase that has gained popularity among Federal agencies and describes a wide variety of efforts undertaken to reduce government’s overall environmental impact.

In recognition of this responsibility and the potential opportunity to positively impact the environment, a series of environmental purchasing mandates and policies have been issued. These policies and mandates outline our obligations and serve as a framework to facilitate use of NPS purchasing power to drive the market for “greener” products and services while also improving the environmental performance of our day-to-day activities of our operations.

GOVERNMENT’S PURCHASING POWER

- \$250 billion: annual purchases of products and services by Federal government
- \$4.7 billion: annual purchases of computers by the Federal government
- \$83-99 million: annual purchases of construction related services (repair and rehabilitation, annual cyclic maintenance, fee demo and line-item projects) by NPS-PWR.

¹ The terms “environmental purchasing,” “green purchasing,” and “green procurement” are used interchangeably in this Guide. The terms “environmental products” and “green products” are also used interchangeably in this Guide.

Purchasing is integral to all aspects of government operations – from simple purchases (such as paper in support of our office functions) to more complex purchases (such as whole building systems for a new park). In addition to products, a large portion of Federal dollars is spent on services – from janitorial to engineering services.

A more systematic integration of environmental factors in our purchases is a natural and important component of NPS's overall environmental effort. Through the purchasing decision process, we have an opportunity and responsibility to affirm our environmental policies and goals for preventing pollution, reducing solid waste, increasing recycling, and stimulating markets for environmentally preferable products and services.

Buying products made from recycled content or other environmental attributes is also an integral component of solid waste management – recycling and waste diversion. By purchasing these products, we not only divert waste from landfills and reduce disposal costs, but we also reduce the pollution created by original resource extraction and manufacturing processes, activities that can contribute to a rise in greenhouse gases and global warming. The more waste that is recycled, the more that is diverted; but unless we create markets and jobs by purchasing recycled content and other environmental products, the environmental benefit is futile. Developing Integrated Solid Wastes Alternative Plans (ISWAPs) and the goal to increase our waste diversion rate is part of our NPS-PWR environmental strategy.

Environmental efforts are underway at state and local governments as well. Thus, depending on where the individual parks are located, there may be opportunities to leverage and partner with organizations at the local level to achieve environmental improvement using wise purchasing strategies.

1.2 Intended Audience

This Guide is provided as a tool for all staff, including end users, program, and contracting personnel, who influence the purchase of materials or services, regardless of the size or scope of the purchase. As such, the information contained in this document will be useful to NPS employees who:

- Identify a need for or request products or services
- Write specifications
- Influence the selection of products or services
- Use or maintain supplies, services, systems, or facilities
- Purchase products and services
- Conduct post purchase follow-up

Although it may seem like a single small purchase will not affect the environmental impact of our program, collectively the impact is tremendous.

1.3 Objectives and Scope of Guide

The acquisition of environmental products and services necessarily involves both defining what is “greener” for a given product or a service and ensuring that the procurement process encourages the purchases of these products. The objective of this Guide is to provide information about both aspects of environmental purchasing.

The Guide also emphasizes the importance of establishing and strengthening the working relationships among those who specify and use products and services and those who acquire such goods. Each community of personnel brings unique expertise; there is no need for one to duplicate the expertise of the other. However, environmental purchasing will be most successful if each group has an appreciation and familiarity with both elements: defining what is “green” and incorporating this into procurement process.

The Guide provides the following:

- A brief description of the legislative and other policy mandates for environmental purchasing.
- Concepts related to environmental purchasing with an in-depth discussion of:
 - Comprehensive Procurement Guidelines (“Buy Recycled”).
 - Environmentally Preferable Purchasing.
- Tools and resources to facilitate putting these concepts into practice, including:
 - A model NPS Affirmative Procurement Program (APP) which individual parks can adopt and implement in whole or in part, modifying the Program to fit individual park’s needs and circumstances.
 - Specific ideas and instructions on ways to integrate environmental factors into construction and A&E contracts.
 - Tips for buying environmentally preferable products and services when using the government purchase card.
- A set of appendices containing background documents and other relevant information.

The Guide touches upon but does not provide detailed information about pollution prevention/hazardous materials purchasing. For information on pollution prevention plans and chemical purchasing, contact Stephen Mitchell, PWR Hazardous Materials Coordinator, at 510-817-1376.

This Guide is a “living” document and can be continually updated and revised. NPS will develop an update process in the near future and encourages you to send any suggestions, ideas, materials and/or procedures to:

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We are hopeful that this Guide will serve as an aid to ensuring that environmental considerations are addressed during your every day purchasing process.

2.0 GOVERNMENT MANDATES RELATING TO ENVIRONMENTAL PURCHASING

A number of legislative, presidential and departmental mandates and policies are in place to promote and facilitate environmental purchasing. Each is briefly summarized below.

2.1 Legislative Mandates

2.1.1 Resource Conservation and Recovery Act

In Section 6002 of the Resource Conservation and Recovery Act (RCRA) (46 USC 6962) which was enacted in 1976, Congress acknowledged the importance of recycling in helping to manage the nation's solid waste and recognized that recycling is not merely the collection of materials, but includes the manufacture of products with these materials and the purchase of recycled content products by consumers. The RCRA section 6002 established the government's buy-recycled program, which uses Federal purchasing power to stimulate the demand for products made with recovered materials. Key provisions of the RCRA include:

- Requires EPA to “designate” products that are or can be made using *recovered materials* and to recommend practices for buying these products.
- Requires all *procuring agencies* to purchase EPA designated products with the highest recovered content level practicable.
- Requires Federal agencies to:
- Give preference in their purchasing programs to products and practices that conserve and protect natural resources and the environment.
- Establish Affirmative Procurement Programs for recycled content products designated by EPA.

2.1.2 Other Relevant Legislation

Section 6604 of the **Pollution Prevention Act of 1990** requires identification of opportunities to use Federal procurement to encourage source reduction.

The **Energy Policy Act of 1992 (EPAcT)** directs the Department of Energy, in association with other agencies, to “identify and designate those energy-efficient products that offer significant potential savings.” EPAcT also calls for “Guidelines to encourage the acquisition and use [of these products] by all Federal agencies.”

Solid Waste Sites in Units of the National Park System in 36 CFR Part 6 (January 23, 1995) stipulates that concessionaires, commercial use authorizations, and contractors will comply with acquisition, recycling, and waste minimization goals established by the NPS.

2.2 Executive Order Mandates

A collection of five Executive Orders form the foundation for the majority of the “greening the government” requirements and initiatives. Many of these have provisions that require and encourage the use of government purchasing power to achieve environmental improvement. Chief among these is **Executive Order 13101, Greening the Government through Waste Prevention, Recycling, and Federal Acquisition**. E.O. 13101 supersedes E.O. 12873. Key provisions include:

- Implements Section 6002, the “buy-recycled” provisions of the RCRA.
- Prohibits the sale and purchase of printing and writing paper not containing a minimum of 30% post consumer fiber by the end of 1998.
- Directs EPA to establish guiding principles for purchasing environmentally preferable products and services.
- Directs agencies to incorporate in their daily operation methods to build markets for environmentally preferable products and services that can reduce pollution, save energy and materials, and create jobs.
- Directs USDA to create a list of biobased products and for Executive agencies to give preference to such products.
- Mandates the evaluation of Federal facility compliance with Section 6002 of the RCRA.
- Requires agencies to establish long-term goals both for waste prevention and recycling and for buying recycled and environmentally preferable products.

Key provisions from the other “greening the government” executive orders, including relevant procurement sections are listed below:

- **E.O. 13123, Greening the Government through Efficient Energy Management**
 - Directs Federal agencies to select ENERGY STAR labeled products.
 - For product groups where ENERGY STAR programs do not yet exist, products that are in the upper 25 percent of energy efficiency as designated by the Department of Energy’s Federal Energy Management Program (FEMP).
 - Supersedes Executive Orders 12845 and 12902.
- **E.O. 13134, Developing and Promoting Biobased Products and Bioenergy**
 - Calls for an annual strategic plan for the President, outlining overall national goals in the development and use of biobased products and bioenergy in an environmentally sound manner, and how these goals can best be achieved through Federal programs and integrated planning.
 - There is no specific provision or requirement on purchasing, however, the Interagency Strategic plan includes a number of references to government procurement of biobased products and use of bioenergy.

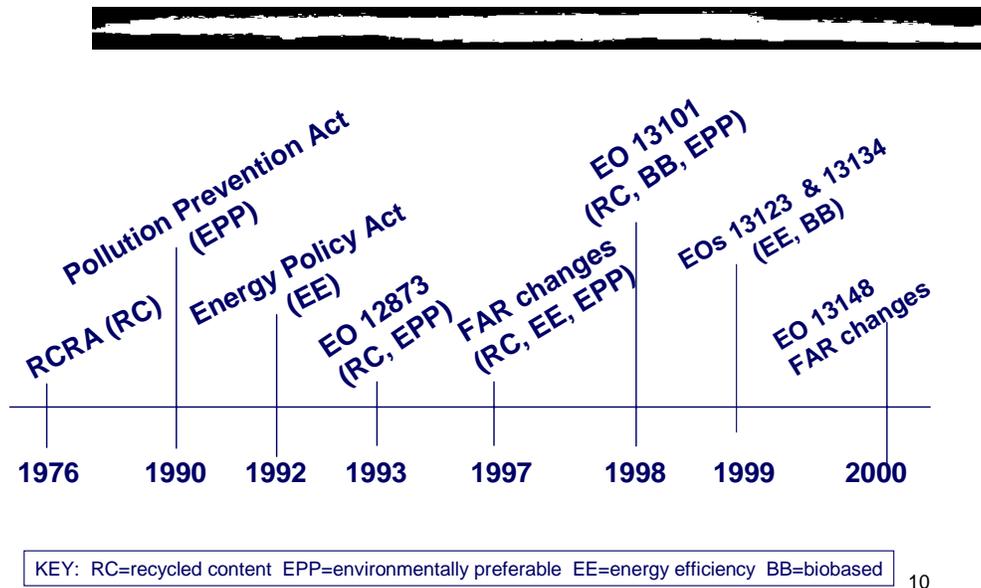
- **E.O. 13148, Greening the Government through Leadership in Environmental Management**
 - Supersedes Executive Order 12856.
 - Requires Federal agencies to implement an environmental management system by the end of 2005 at all applicable facilities.
 - Directs agencies to establish and implement environmental compliance audit programs and policies that emphasize pollution prevention as a means to both achieve and maintain environmental compliance.
 - Retains requirements of EPCRA reporting from Executive Order 12856.
 - Requires agencies to pilot life cycle assessment and environmental cost accounting concepts in their operations.
 - Encourages agencies to promote the sustainable management of Federal facility lands through the implementation of cost-effective, environmentally sound landscaping practices, and programs to reduce adverse impacts to the natural environment.
 - Establishes an awards program to recognize environmental leadership practices.
 - Contains a number of procurement-related provisions to achieve reductions in use and release of toxic chemicals, including specific requirements for each agency to:
 - Reduce its reported Toxic Release Inventory (TRI) releases and off-site transfers of toxic chemicals for treatment and disposal by 10 percent annually, or by 40 percent overall by December 31, 2006, through innovative pollution prevention, effective facility management, and sound acquisition and procurement practices;
 - Reduce its use of selected toxic chemicals, hazardous substances, and pollutants or its generation of hazardous and radioactive waste types at its facilities by 50 percent by December 31, 2006 through identification of proven substitutes and established facility management practices, including pollution prevention;
 - Develop a plan to phase out the procurement of Class I ozone-depleting substances for all non-excepted uses by December 31, 2010 by evaluating present and future uses of ozone-depleting substances and maximizing the purchase and the use of safe, cost effective, and environmentally preferable alternatives.

- **E.O. 13149, Greening the Government Through Federal Fleet and Transportation Efficiency**
 - Directs each agency to reduce its annual petroleum fuel consumption through improvements in fleet fuel efficiency and the use of alternative fuel vehicles (AFVs) and alternative fuels.
 - Sets a target of 20 percent reduction of petroleum fuel consumption of vehicle fleet by the end of FY 2005 (compared with FY 1999 petroleum consumption levels).

- Directs agencies to develop a strategy to meet the target goal through a variety of measures, including: the use of alternative fuels; the acquisition of vehicles with higher fuel economy (including hybrid vehicles), the substitution of cars for light trucks, an increase in vehicle load factors, a decrease in vehicle miles traveled, and a decrease in fleet size.
- Specifically requires agencies to purchase AFVs and higher fuel economy vehicles and use of alternative fuels.
- Requires agencies to use re-refined oil in agency fleets unless it is not available or does not meet performance needs.

A full text of these Executive Orders can be viewed on www.ofee.gov. Click on “Greening the Government Executive Orders.” A timeline of the environmental purchasing mandates is shown below.

WHY BUY GREEN: LEGISLATIVE AND EO HISTORY



2.3 The Federal Acquisition Regulation (FAR)

The Federal Acquisition Regulation has been revised in recent years to facilitate implementation of environmental purchasing. The modifications are intended to improve the Federal government’s purchase and use of recycled content, energy efficient, biobased, and environmentally preferable products and services. Among the specific FAR provisions are:

- Part 7, **Acquisition Planning** – requires environmental and energy considerations in acquisition policies and in the contents of written acquisition plans. It also makes the considerations part of an agency head’s routine responsibilities.
- Part 10, **Market Research** – requires market research policies and procedures to include environmental and energy-efficiency considerations.
- Part 11, **Describing Agency Needs** – includes definitions of new, reconditioned, remanufactured, and virgin material. It also incorporates environmental and energy-efficiency considerations into product descriptions.
- Part 12, **Commercial Items** – directs agencies to buy commercially available products instead of developing government-specific requirements. Commercial items can contain recovered materials. Section 12.301(e)(3) provides that Contracting Officers may use the provisions and clauses contained in Part 23 regarding the use of recovered material, when appropriate.
- Part 15, **Contracting by Negotiation** – incorporates environmental and energy-efficiency considerations into evaluation factors and subfactors.
- Part 23, **Environmental, Conservation, Occupational Safety, and Drug-Free Workplace** – addresses energy conservation, the use of recycled materials, and contracting for environmentally preferable and energy-efficient products and services.
- Part 36, **Construction and Architect-Engineer Contracts** – incorporates environmental concerns into the contracting procedures and selection criteria for these types of contracts.
- Part 42, **Contract Administration** – addresses the environmental concerns that must be incorporated into contract administration functions.
- Part 52, **Solicitation Provisions and Contract Clauses** – addresses material requirements and recycled-content certification.

A more in-depth discussion of the FAR provisions related to environmental purchasing can be found in Section 6.3.

2.4 Departmental and Servicewide Mandates and Policies

In addition to these Federal mandates and policies, there are a number of departmental and servicewide directives and policies that require and support environmental initiatives. At the Departmental level, the *Strategic Plan for Greening the Department of the Interior through Waste Prevention, Recycling, and Federal Acquisition* serves as an important framework and specific requirements.



A LONG HISTORY OF COMMITMENT TO SUSTAINABILITY

The mission of the National Park Service in the 1916 Organic Act states “...which purpose is to conserve the scenery and natural and historic objects and the wildlife therein, and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.” The NPS in partnership with internal and external stakeholders can extend the benefits of natural and cultural resource conservation and outdoor recreation throughout this country and the world.

The *Greening Strategic Plan* states:

The Department of Interior's mission is to protect and provide access to our Nation's natural and cultural heritage and honor our trust responsibilities to Indian Tribes and our commitment to Island communities. The Department will be an innovative leader in "greening" the Federal government by actively and systematically protecting the natural processes that sustain life on Earth.

To fulfill this vision, Interior will, in its own operations, minimize solid waste, prevent pollution, save energy and other resources, reduce greenhouse gas emissions, and encourage public support and participation.¹

For the Pacific West Region, PWR Directive PW-051, Environmentally Preferable Purchasing Policy Statement serves as the guiding document. A full text of this Directive is included below:

D52(PGSO-AC)

March 12, 2002

PACIFIC WEST REGION DIRECTIVE: PW-051

SUBJECT: Environmentally Preferable Purchasing Policy

The Pacific West Region is a premier environmental advocate committed to following Government-mandated programs and policies, as well as seeking improvements to these efforts in support of our Regional and Servicewide goals for Environmental Leadership. Our Region recognizes the importance of creating markets for materials recovered in our recycling programs, reducing the volume of solid waste sent to our landfills, and making more efficient use of our natural resources. All of these activities will help reduce our impact on global warming, and serve as a model for Federal agencies, our neighboring communities, and the visiting public.

Therefore, in all efforts of park operations, the Pacific West Region will strive, to the maximum extent practical, to:

- Develop a program to prevent and reduce waste before products and services are acquired;
- Educate park employees on the opportunities to purchase EPA designated Comprehensive Procurement Guideline (CPG), biobased, and other environmentally preferable products and promote the opportunities where these products can be used;
- Purchase and use products and materials which are made from recycled or recovered content or which have other environmental attributes;
- Conduct acquisitions which incorporate environmental considerations into all aspects of planning, development of workplans and specifications, and contract administration;
- Conduct procedures for monitoring, reviewing, and reporting on each park's environmentally preferable purchasing program as outlined in the guideline, *Environmental Purchasing in the National Parks: A How to Guide*, which will be distributed separately to each park.

John J. Reynolds
Regional Director, Pacific West Region

RESPONSIBLE OFFICE: Office of Contracting and General Services, Pacific Great Basin Support Office
DISTRIBUTION: Directorate and Superintendents, Pacific West Region

¹ Excerpted from *Strategic Plan for Greening the Department of the Interior Through Waste Prevention, Recycling and Federal Acquisition*, May 2000, located at: www.webteam.nbc.gov/green/attachments/strat_plan.pdf.

Other relevant policies and directives include:

- DIAPR 97-2, Department of the Interior Acquisition Policy Release, Subject: Environmental Contracting Initiatives.
- PWR Regional Director's Memo dated April 21, 1999, Subject: Use of Re-refined Oil and Environmentally Preferred Products.
- PWR Regional Director's Memo dated June 15, 2001, Subject: Environmentally Preferable Purchasing, Buying Recycled, and the Comprehensive Procurement Guideline.
- PWR Directive PW-048: Sustainable Design and Construction Practices.

A full text of these directives and policies are included under Appendix 11.3. In addition, a number of these can be accessed at: <http://165.83.71.10/maintenance/directives.htm>.

3.0 ROLES AND RESPONSIBILITIES

A number of agencies have oversight or coordination responsibilities under the RCRA and Executive Order 13101.

3.1 Office of Federal Environmental Executive

Under the 1998 Executive Order 13101, the **Federal Environmental Executive**, who is appointed by and reports to the President, is responsible for:

- Coordinating and assisting environmental efforts of Federal agencies in waste prevention, recycling, the affirmative procurement of guideline items, and the acquisition of recycled and environmentally preferable products and services.
- Preparing a biennial report to the President on agencies' actions. A copy of the most recent biennial report can be seen at: www.ofee.gov.
- Developing a governmentwide strategic plan ("Greening the Government Through Waste Prevention, Recycling, and Federal Acquisition," issued March 12, 1999 by a White House Task Force) to prevent waste and to encourage the purchase of environmental products.

3.2 Office of Federal Procurement Policy

The **Office of Federal Procurement Policy (OFPP)** in the Office of Management and Budget (OMB) is responsible for:

- Coordinating the RCRA requirements with other Federal acquisition policies; and
- For reporting to the Congress every two years on Federal agencies' progress in implementing these requirements.

The Office of Federal Procurement Policy and the Office of the Federal Environmental Executive coordinate their information requests from the major procuring agencies and issue a joint report to the Congress.

3.3 Responsibilities of the Department of the Interior

According to the 1998 Executive Order 13101, major Federal procuring agencies that are responsible for purchases of more than \$50 million annually of goods and services are to appoint an Agency Environmental Executive to:

1. Translate the strategic plan into specific Agency plans,
2. Implement the plans, and
3. Report to the Office of the Federal Environmental Executive on their progress.

Willie Taylor, Director of the DOI Office of Environmental Policy and Compliance, is the current Agency Environmental Executive.

3.3.1 National Park Service Reporting System

Each agency employee has an important contribution to make in ensuring environmental purchasing works at the National Park Service. The DOI, Office of Environmental Policy and Compliance, is developing a reporting system as identified in the Strategic Greening Plan. Listed below are some areas of responsibility that have been, or will be expected to be, assigned as part of the NPS reporting system:

1. Procurement Requisitioner: The unit or individual that identifies a specific requirement for the agency and has responsibility for providing the details of the requirement for procurement purposes.
2. Program/Project Manager: The unit leader responsible for management functions within a specific program and that has responsibility for the oversight of all program procurements.
3. Contracting Officer: The individual authorized to obligate funds and that is responsible for designating procurement methods.
4. Regional Environmental Manager/Environmental Purchasing Coordinator: The individual(s) at the agency regional level that is responsible for reviewing environmental regulatory requirements, including Federal purchasing requirements.
5. Agency Environmental Executive (AEE): The individual(s) at the agency national level that is responsible for reviewing environmental regulatory requirements, including Federal purchasing requirements. The current AEE for the Department of the Interior is Willie Taylor.
6. Link to National Park Service Reporting: The reporting system to be used to track environmental purchasing activities.

3.3.2 PWR Environmental Purchasing Roles and Responsibilities

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(Waste prevention, recycling, Integrated Solid Waste Alternative Plans (ISWAPs), composting, Environmentally Preferable Purchasing/Comprehensive Procurement Guideline, Environmental Leadership, sustainable practices, regulatory and policy guidance, funding.)

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PWR Green Procurement Contracting Lead (Environmentally Preferable Purchasing, Environmental Leadership, FAR regulatory and policy guidance.)

Jill Clayton - Contracting Officer, Pacific Great Basin Support Office

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PWR Green Procurement Simplified Acquisition Lead (Environmentally Preferable Purchasing, Environmental Leadership, FAR regulatory and policy guidance.)

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(Alternative energy conservation programs, renewable energy, energy efficient purchasing, Environmental Leadership, sustainable practices, regulatory and policy guidance, funding).

Steve Mitchell - Hazardous Materials Coordinator, Pacific West Region

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(Pollution Prevention, toxic product substitution, regulatory and policy guidance, funding.)

George Turnbull - Superintendent, Pacific Great Basin Support Office

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PWR Sustainability and Environmental Leadership Management Liaison (represents Regional Director).

4.0 ENVIRONMENTAL PURCHASING PROGRAMS

A number of Federal programs were established to support implementation of environmental purchasing mandates. This section includes information about Federal programs that provide information, tools, and other resources to assist agencies put environmental purchasing into practice. They are:

- The Comprehensive Procurement Guideline (CPG), or “Buy Recycled” Program (U.S. Environmental Protection Agency);
- The Environmentally Preferable Purchasing Program (U.S. EPA);
- Energy Efficiency Program (Department of Energy’s Federal Energy Management Program [FEMP] and U.S. EPA); and
- Biobased Program (U.S. Department of Agriculture).

Because each of these programs was established under a different set of circumstances, authorizing policies and legislative mandates, each tends to focus on a different set of environmental concerns and reflects the evolution of the environmental purchasing movement (e.g., the CPG Program’s emphasis is reducing impacts associated with solid waste while the FEMP program’s focus is on reducing the impacts associated with energy use). Although information about these programs is presented separately, application of the concepts and tools is not meant to be done on a piecemeal basis. In its simplest terms, environmental or environmental purchasing encourages the selection of products and services on a wide variety of environmental attributes, including recycled content, energy efficiency, and reduced toxicity.

The CPG requirements, because they are statutorily mandated, should be one of the first things that is considered when the purchase of a product is contemplated. Having said this, the product categories covered in the CPG may not reflect those products or services of highest usage by NPS or recycled content may not be a relevant attribute, e.g., in purchasing cleaning products. In other instances, a particular local environmental condition or priority may dictate giving preference to products that would contribute to improving such local conditions. As in all acquisition decisions, NPS staff are expected to exercise professional judgment and individual discretion in applying the concepts and information in this Guide.

4.1 Comprehensive Procurement Guideline

The Comprehensive Procurement Guideline (CPG) Program is the basis of the Federal government’s “buy-recycled” program and is part of EPA’s continuing efforts to promote the use of materials recovered from solid waste. Buying recycled content products closes the recycling loop by ensuring that the materials collected in recycling programs will be used again in the manufacture of new products.

“Recovered materials” is defined as waste materials and byproducts that have been recovered or diverted from solid waste, but does not include materials and byproducts generated from, and commonly reused within, an original manufacturing process.

“Procuring agency” is defined as a Federal agency, or any state agency or agency of a political subdivision of a state, that is using appropriated Federal funds for procurement.

The purpose of CPG (Comprehensive Procurement Guideline) is threefold:

1. Use the Federal buying power to create markets for recycled products and end-use markets for **recovered materials** used to make new products;
2. Stimulate an increase in recycling capacity by industry; and
3. Conserve natural resources and preserve the environment.

Pursuant to the RCRA Section 6002 and EO 13101, EPA is required to designate products that are or can be made with recovered materials and issue guidance on buying recycled-content products in Recovered Materials Advisory Notices (RMANs). Once designated, all **procuring agencies** must purchase these products with the highest recycled content unless the items:

- Are not available competitively;
- Are not available within a reasonable time frame;
- Do not meet reasonable performance standards; or
- Are only available at an unreasonable price.

The CPG is published in the Federal Register and the list of designated products is then codified in the Code of Federal Regulations, Title 40, Part 247.

The RMANs are issued in the Federal Register concurrently with the revision to the CPG. They contain recommended recovered materials content levels and reference pertinent specifications and other purchasing information. A sample CPG entry is shown below.

Sample CPG Guideline – Commercial/Industrial Sanitary Tissue Paper¹

EPA'S RECOMMENDED RECOVERED FIBER CONTENT LEVEL			LIST OF MANUFACTURERS AND SUPPLIERS
Item	Post-consumer Fiber (%)	Recovered Fiber (%)	<i>[There are 40 entries in this list; the following is a sample entry]</i>
Bathroom tissue	20-60	20-100	Javits-Wagner-O'Day Program c/o National Industries for the Blind (NIB)/NISH 1901 North Beauregard Street; Alexandria, VA 22311 Phone: 800 433-2304; Fax: 703 998-5416 The Javits-Wagner-O'Day (JWOD) Program is a mandatory source for Federal customers. JWOD nonprofit agencies furnish bathroom tissue with 100 percent recovered fiber and 20 percent post-consumer fiber content.
Paper towels	40-60	40-100	
Paper napkins	30-60	30-100	
Facial tissue	10-15	10-100	
General purpose industrial wipers	40	40-100	
NOTE: The content levels should be read as X% recovered fiber, including Y% post-consumer fiber and <u>not</u> as X% recovered fiber plus Y% post-consumer fiber.			

¹ From "Greening Your Products," Tellus Institute, March 2002 www.ofee.gov

As of April 2002, EPA has designated 54 products (grouped into categories) that are listed below. Additional products have been proposed for designation. Users of this Guide should visit the CPG web site www.epa.gov/cpg for the most current list of designated items.

Current List of Products With CPG Requirements

<p><u>Construction Products</u></p> <ul style="list-style-type: none"> · Building insulation products · Carpet · Carpet cushion · Cement and concrete containing: <ul style="list-style-type: none"> a. Coal fly ash b. Ground granulated blast furnace slag · Consolidated and reprocessed latex paint · Floor tiles · Flowable fill · Laminated paperboard · Patio blocks · Railroad grade crossing surfaces · Shower and restroom dividers/partitions · Structural fiberboard <p><u>Landscaping Products</u></p> <ul style="list-style-type: none"> · Garden and soaker hoses · Hydraulic mulch · Plastic lumber landscaping timbers and posts · Lawn and garden edging · Compost made from yard trimmings or food waste <p><u>Nonpaper Office Products</u></p> <ul style="list-style-type: none"> · Binders, clipboards, file folders, clip portfolios, and presentation folders · Office recycling containers · Office waste receptacles · Plastic desktop accessories · Plastic envelopes · Plastic trash bags · Printer ribbons · Toner cartridges 	<p><u>Paper and Paper Products</u></p> <ul style="list-style-type: none"> · Commercial/industrial sanitary tissue products · Miscellaneous papers · Newsprint · Paperboard and packaging products · Printing and writing papers · Park and recreation products · Park benches and picnic tables · Plastic fencing · Playground equipment · Playground surfaces · Running tracks <p><u>Transportation Products</u></p> <ul style="list-style-type: none"> · Channelizers · Delineators · Flexible delineators · Parking stops · Traffic barricades · Traffic cones <p><u>Vehicular Products</u></p> <ul style="list-style-type: none"> · Engine coolants · Re-refined lubricating oils · Retread tires <p><u>Miscellaneous Products</u></p> <ul style="list-style-type: none"> · Awards and plaques · Industrial drums · Mats · Pallets · Signage · Sorbents · Manual-grade strapping
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Procedures for purchasing designated items are included at FAR 23.405, Procedures. These procedures include placing in the contract file a written justification if the applicable purchase does not contain recovered material. Agencies are also required to establish internal procedures for consolidating and reporting contractor estimates of recovered materials.

EPA’s CPG web site contains the list of designated products, the recommendations, fact sheets that include case studies of purchasing the products, and lists of known manufacturers or vendors of the designated products (www.epa.gov/cpg). The web site also includes a list of additional products that have been proposed by EPA for designation, such as nylon carpet and carpet backings, roofing materials, office furniture, blasting grit, and other items. Paper copies of the CPG and RMAN Federal Register notices are also available by contacting the RCRA Hotline: 800-424-9346.

4.2 Environmentally Preferable Purchasing

Pursuant to Executive Order 13101, EPA issued guidance to assist Federal agencies with implementation of environmentally preferable purchasing. Executive Order 13101 and the FAR require agencies to use the concepts and principles contained in EPA's guidance to acquire products and services that are environmentally preferable.

4.2.1 Guiding Principles

EPA has developed five guiding principles to provide broad guidance for applying environmentally preferable purchasing in the Federal government:

Guiding Principle 1: Environment + Price + Performance = Environmentally Preferable Purchasing- Environmental considerations should become part of normal purchasing practice, consistent with such traditional factors as product safety, price, performance, and availability.

Guiding Principle 2: Pollution Prevention- Consideration of environmental preferability should begin early in the acquisition process and be rooted in the ethic of pollution prevention, which strives to eliminate or reduce, upfront, potential risks to human health and the environment.

Guiding Principle 3: Life Cycle Perspective/ Multiple Attributes- A product or service's environmental preferability is a function of multiple attributes from a life cycle perspective.

Guiding Principle 4: Comparison of Environmental Impacts- Determining environmental preferability might involve comparing environmental impacts. In comparing environmental impacts, Federal agencies should consider: the reversibility and geographic scale of the environmental impacts, the degree of difference among competing products or services, and the overriding importance of protecting human health.

Guiding Principle 5: Environmental Performance Information- Comprehensive, accurate, and meaningful information about the environmental performance of products or services is necessary in order to determine environmental preferability.

The full text of the guiding principles, along with other background information can be found at: www.epa.gov/oppt/epp/docback.htm.

MAKING WISE, INFORMED CHOICES

In making environmentally preferable purchasing decisions, you may be faced with selecting among products with very different environmental attributes. For example, the market currently offers two types of environmental paints: paints that have been recovered and reprocessed or reconstituted, and virgin paints that have very low or no VOCs. Recycled paint is a good environmental purchase from the waste disposal viewpoint. Low VOC paint is good from an indoor air quality perspective.

An ideal situation would be to have paints that are low in VOCs and with recycled content. However, given the current state of the market, this is not an option yet.

Based on this, specifiers and purchasers need to look at how the paints will be used: will it be for indoor use or outdoor use? Are there indoor air quality issues? Where the paints will be used? The answers to these types of questions should guide the final selection. Since reprocessed paints tend to have higher VOC contents, they may be better suited for outdoor use. Paints with lower or no-VOCs may be a better choice for indoor use.

The decision of what is environmentally preferable will often depend on a variety of factors and specific NPS applicability of the concepts will vary, such as:

- Type and complexity of the product or service being purchased;
- Whether or not the product or service is commercially available;
- Type of procurement method used (e.g., negotiated contract, sealed bid, or simplified procedures);
- Time frame for the requirement; and
- Dollar amount of the requirement.

Check out the **General EPP Training Tool**, a fun multi-media tool that covers all the basics, case studies and more on EPP located at:
www.epa.gov/oppt/epp/gentt/index.html.

In all acquisitions, NPS personnel should use their professional judgment and common sense, whether assessing a product or service’s performance, cost, or availability. Similarly, NPS personnel should use reasonable discretion in making their environmentally preferable purchasing decisions.

The guiding principles were developed to take into consideration local conditions, life cycle impacts and the particular needs and specific circumstances that an individual organization would face in making purchasing decisions. In this sense, EPP is more of a process rather than a specific outcome.

Thus, unlike the other environmental purchasing programs (e.g., CPG, Energy Star, and biobased programs) the EPP Program does not maintain a list of “EPP” products. However, there are lists that have resulted from specific pilot projects. Refer, for example, to a list of environmentally preferable paints that meet standards developed by the U.S. Army-Aberdeen Proving Ground and Green Seal (www.epa.gov/oppt/epp/pdfs/paint.pdf). Third party environmental certification programs, such as Green Seal and SmartWood, have developed their own lists of products. NPS-PWR also has created its own recommendations about environmental preferability for a number of product categories. A discussion of this can be found in Section 8.0 (see tip #2).

IS IT BETTER TO USE PLASTIC LUMBER OR CERTIFIED WOOD?

It depends on your needs! Plastic lumber products have merit in that they are composed of used plastics that would otherwise end up in a landfill and they require little or no maintenance. However, purchasing certified wood ensures long-term viability and market for wood products from sustainably managed forests. In addition, use of certified wood may better fit the historic look of a particular park’s needs.

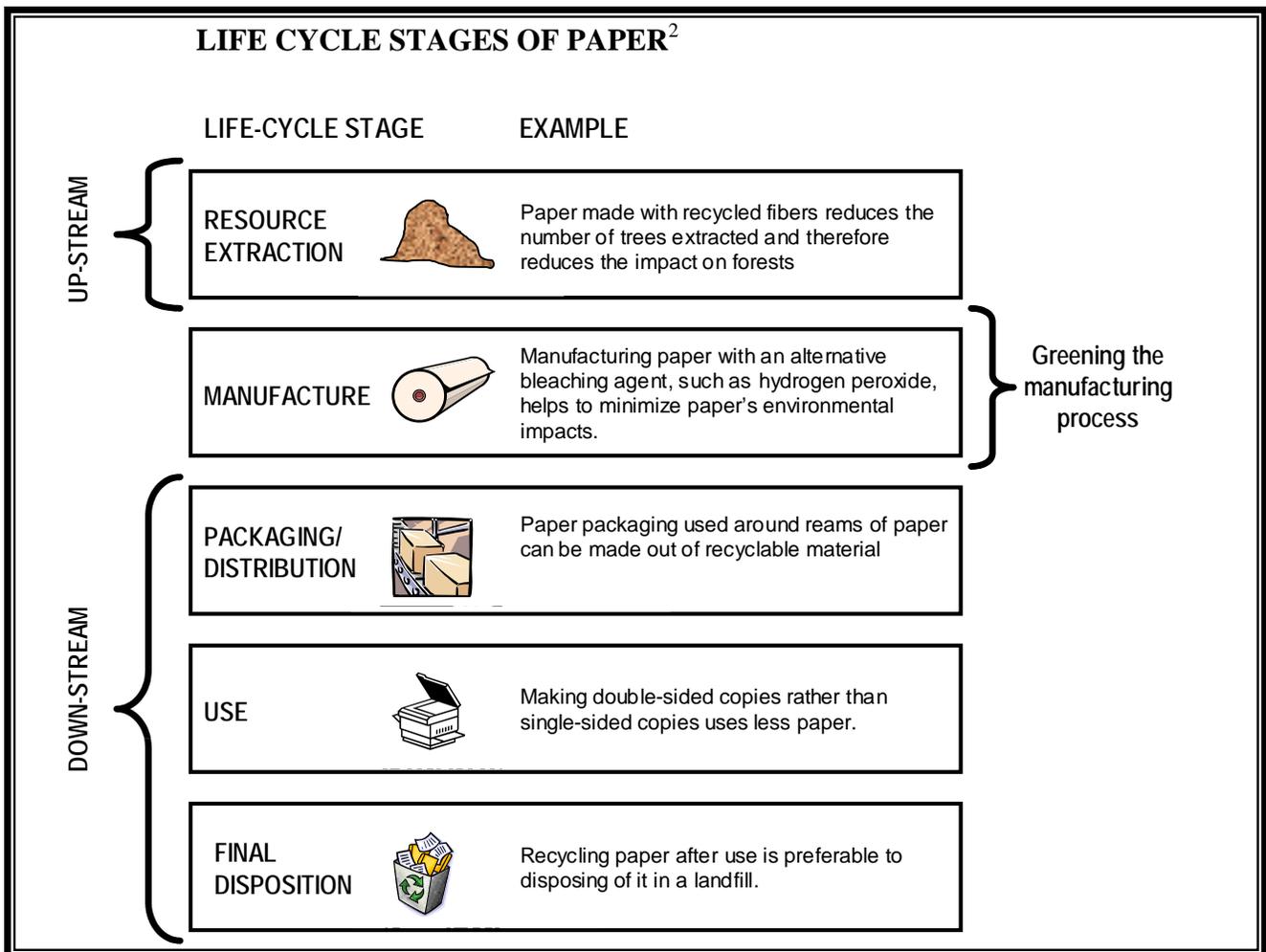
In addition to these lists, EPA has documented, through a series of case studies, how other organizations have applied the EPP concepts. The case studies can be accessed at www.epa.gov/oppt/epp/doccase.htm.

4.2.2

Why Consider Life Cycle Impacts?

A product can be considered “greener” based on its characteristics or “attributes.” Those attributes can reduce the environmental impact of a product in a variety of ways. Examining a product’s life cycle across its many stages provides a useful framework for thinking about how product choices and the attributes we focus on will impact the environment. The diagram below illustrates product attributes that are associated with each life cycle stage, using paper manufacturing as an example.

For purchasers, focus is usually placed on the environmental impacts arising from use of products, and to some extent, disposal. But it is important to consider both the upstream impacts (those that occur before the product is manufactured, such as mining or processing the input materials) and downstream impacts (after manufacture including distribution, use, and final disposal) of a product. When making purchasing decisions, it is important to consider the environmental impacts along as many stages of a product’s life cycle as possible.



² Adapted from “Greening Your Products,” Tellus Institute, March 2002. Available at: www.ofee.gov. “What’s New”

4.2.3 Life Cycle Cost vs. Life Cycle Assessment

The terms life cycle cost and life cycle assessment are often used interchangeably but have different meanings. According to OFPP Policy Letter 92-4, **life cycle cost** (LCC) means the amortized annual cost of a product, including capital costs, installation costs, operating costs, maintenance costs, and disposal costs discounted over the lifetime of the product. This Policy Letter (see Appendix 11.3.2) requires Federal agencies to use life cycle cost analysis, wherever feasible and appropriate, to assist in selecting products and services.

Whenever possible, costs should be calculated over the life of the item, not just the initial, upfront cost. When comparing alternative products, the initial cost of the acquisition, as well as lifetime maintenance costs, operational costs, for example, must be considered in the analysis. A product having a higher initial cost may have a lower operational cost or a higher resale value and will, therefore, prove to be a better value and more cost-effective compared to the alternatives. It is important to note, however, that life cycle cost analysis only looks at the “internal” (e.g., operations and maintenance) costs and not the “external” (e.g., closing of a beach due to pollution) costs of products.

Life cycle assessment (LCA) means the comprehensive examination of a product’s environmental impacts throughout its lifetime, including raw material extraction, transportation, manufacturing, use, and disposal. LCAs capture both internal and external impacts associated with a product or a process. However, LCAs traditionally do not include cost comparisons. The National Institute for Standards and Testing’s (NIST) *Building for Environmental and Economic Sustainability* (BEES) is one of few tools that provides purchasers with both LCA and LCC results of building materials.

For users of this Guide, it is important to become familiar with both of these terms (LCC and LCA) and to try to apply available tools when practical. Often times, a common sense approach is a fine start without necessarily getting bogged down in the details of analysis. We will also need to tailor our approach and level of analysis to fit the complexity of the product and service categories being purchased.

BEES

The BEES (Building for Environmental and Economic Sustainability) software provides purchasers with a tool for balancing the environmental and economic performance of building products. Developed by the NIST (National Institute of Standards and Technology) Building and Fire Research Laboratory, the tool is based on consensus standards and designed to be practical, flexible, and transparent. Version 2.0 of the Windows™-based decision support software, aimed at designers, builders, and product manufacturers, includes actual environmental and economic performance data for 65 building products.

The software is being refined to include brand-specific performance information. As of now, however, comparisons can only be made among broad categories of products. For example, tile vs. carpet vs. linoleum as a floor covering option.

BEES software can be downloaded for free at:

www.bfrl.nist.gov/oe/bees.html.

The National Park Service installed a wood-plastic composite lumber raised boardwalk on a portion of the trail on Theodore Roosevelt Island in Washington, DC. This portion of the trail flooded periodically, causing trail users to skirt the trail path and slowly creating damage to the adjacent ecosystem. The cost of the decking boards is approximately 1.65 times that of conventional lumber but has an estimated “payback” period of seven years due to the reduced (i.e., nearly zero) maintenance costs. Additionally, the raised boardwalk provides qualitative benefits: year-round access to this part of the island for handicapped.

4.3 Energy and Water Efficient Purchasing

Federal policies that encourage energy efficient purchasing derive from the Energy Policy Act of 1992, Executive Order 13123, and the FAR (48 CFR 23.704). These mandates require agencies to:

- Select, where life cycle cost-effective, ENERGY STAR and other energy-efficient products when acquiring energy-using products; and
- Select products that are in the upper 25% of energy efficiency as designated by Federal Energy Management Program for product categories where ENERGY STAR labels are not available.

The Department of Energy’s Federal Energy Management Program (FEMP) issues a series of *Product Energy Efficiency Recommendations* that identify “recommended” efficiency levels for energy-using products—i.e., levels that meet the criteria of the Executive Order and the FAR. The *Recommendations* also:

- Identify Federal supply sources that offer efficient products.
- Suggest ways for buyers to identify efficient products when buying from commercial sources.
- Present a cost-effectiveness example in order to help buyers judge whether a higher price is really “worth it.”
- Offer tips to help buyers and users save energy in selecting and using the products.
- To obtain copies of the *Product Energy Efficiency Recommendations*, contact the help desk at 1-800-363-3732, or visit the Federal Energy Management Program’s Home page at www.eren.doe.gov/femp/procurement. The full set of *Recommendations* is available in FEMP’s *Buying Energy Efficient Products* binder by calling the help desk. There is no charge for the binder.
- In the Web versions of the *Recommendations*, there are links to lists of complying models for most products (including all those that are covered by ENERGY STAR program). Additionally, some products have interactive “cost calculators,” which allow users to enter their own utility rates, hours of use, for example, to help estimate the energy cost savings that are likely to accrue from buying a more efficient model.

Energy-efficient products are those products that are in the upper 25 percent of energy efficiency for all similar products, or at least 10 percent more efficient than the minimum level that meets Federal standards.

Water-saving products are defined as those that are in the upper 25 percent of water conservation for all similar products, or at least 10 percent more water conserving than the minimum level that meets the Federal standards.

The following is a list of product categories covered in the FEMP *Recommendations* and/or the ENERGY STAR program. Users of this Guide should check the FEMP website for the most current list: www.eren.doe.gov/femp/procurement.

PRODUCT CATEGORIES COVERED BY FEMP AND ENERGY STAR

Commercial Equipment

Air-Cooled Electric Chillers
 Water-Cooled Electric Chillers
 Unitary Air Conditioners *
 Heat Pumps *
 Boilers
 Ground Source Heat Pumps *

Comm./Industrial Technologies

Distribution Transformers *
 Centrifugal Pumping Systems

Construction Products

Residential Windows *
 Roof Products *

Office Technologies

Computers *
 Monitors *
 Printers *
 Copiers *
 Fax Machines *

Water Saving Technologies

Faucets
 Showerheads
 Toilets
 Urinals

Lighting Technologies

Exit Signs *
 Fluorescent Tube Lamps
 Fluorescent Ballasts
 Industrial HID Luminaires
 Downlight Luminaires
 Fluorescent Luminaires
 Compact Fluorescent Lamps *
 Motors Lighting Controls

Residential Appliances

Room Air Conditioners *
 Dishwashers*
 Refrigerators *
 Clothes Washers *

Residential Equipment

Central Air Conditioners *
 Gas Furnaces *
 Electric Water Heaters
 Gas Water Heaters
 Air Source Heat Pumps *
 Ground Source Heat Pumps *

Commercial Appliances

Ice Cube Machines
 Clothes Washers

**Indicates Energy Star labeled items*

Below is a list of the products covered by the EPA/DOE ENERGY STAR program, but *not* currently covered by the above listed FEMP *Recommendations*.

Residential Boilers
 Programmable Thermostats
 Multi-Function Machines
 Televisions
 TV/VCRs (combo units)
 DVD Players
 Water Coolers
 Residential Ventilating Fans

Set-Top Boxes
 Residential Lighting Fixtures
 Scanners
 VCRs
 Home Audio Equip
 Utility Transformers
 Residential Dehumidifiers
 Traffic Lights

The **ENERGYSTAR** Purchasing Initiative Web Site also has procurement information available at www.energystar.gov.

In addition to Federal requirements, DOI's Energy Plan has information about departmental and service-wide goals and requirements. Directive PW-047, Energy Management and Water Conservation, The Green Energy Parks Program, provides guidance to parks on the regional energy program. This Directive can be accessed at: <http://165.83.71.10/maintenance/directives.htm>.

4.4 Biobased Product Purchasing

Section 504 of Executive Order 13101 requires the U.S. Department of Agriculture (USDA) to designate biobased items and encourages agencies to modify their affirmative procurement programs to give consideration of those products.

USDA's Biobased Products Coordination Council (BPCC) oversees and coordinates the Biobased Products Initiative. It is anticipated that the BPCC will publish a list of biobased products on the www.bioproducts-bioenergy.gov website in the spring/summer of 2002. In this list, USDA will provide buyers with a "yellow pages" type source list of products.

A biobased product is a commercial or industrial product, other than food or feed, that is made from biological products or renewable domestic agricultural (plant, animal, and marine) or forestry materials, for example: soy ink.

Listed below is a proposed list of biobased product categories for which specific recommendations and sources will be published:

- Adhesives
- Bioplastics and Biopolymers
- Construction Materials/Composites/Plastic Lumber
- Fibers and Tree Free Paper and Packaging
- Fuels and Fuel Additives
- Inks
- Landscaping Materials/Composted Animal and Ag Waste
- Lubricants and Functional Fluids
- Paints and Coatings
- Solvents and Cleaners
- Sorbents

ARE ALL BIOBASED PRODUCTS ENVIRONMENTALLY PREFERABLE?

It depends! Biobased products have many positive environmental attributes, such as use of renewable resources, and serve as less toxic alternatives to other product inputs. However, certain aspects, for example, the pesticides, herbicides, and level of water consumption necessary for the biobased product, might outweigh its positive environmental aspects.

USDA in its listing process will take into consideration the environmental impacts associated with a proposed product. However, purchasers should remember that the full range of environmental impacts for any product, including biobased products, should be evaluated when making purchasing decisions.

4.5 Federal Sources for Environmental Products

There are many sources for environmentally preferable products, both through Federal government sources and commercial sources. This section includes Federal government sources and web sites to access products. Within many of these sites there are links to commercial vendors.

The Federal Supply Schedule program includes contractors who offer environmental products and services. The schedules offer the following advantages:

- Products that have met or exceed the EPA minimum content standards are available;
- Products have already been competitively acquired; and
- Electronic catalogs of compliant products offer easy shopping.

Sources include:

- **General Services Administration (GSA).**
 - Environmental Products Guide (www.pub.fss.gsa.gov/environ/).
Or call (817) 334-5215.
- **Government Printing Office (www.gpo.gov).**
- **Defense Logistics Agency (DLA) Catalogs.**
 - Environmentally Preferred Product Catalog (www.supply.dla.mil/prodenv.asp)
or call 1-800-345-6333 or DSN 695-4865.
 - Energy Efficient Lighting Catalog (call 1-800-DLA-BULB).
- **Javits-Wagner-O'Day (JWOD) Catalog.**
 - Mandatory source of supply for Federal employees.
(www.jwod.gov or www.jwod.com)
Or call (703) 603-7740 or fax (703) 603-0655
Or email info@jwod.gov.
- **Department of Energy's (DOE), Federal Energy Management Program (FEMP)**
(www.eren.doe.gov/femp/financing/escolist.html).
 - Qualified List of Energy Service Companies (ESCO's).
 - Private industry companies that have submitted an application and been qualified by the DOE as offering energy saving products.
- **ENERGY STAR®.**
 - A voluntary labeling program designed to identify and promote energy-efficient products (www.energystar.gov).

Appendix 11.1 includes a more comprehensive list of web-resources to assist NPS staff identify sources of environmental products. However, the list is not all-inclusive and is only meant to offer a starting point. In addition, the list is not intended as a recommendation for the use of any specific commercial contractor, but is only one source of information.

5.0 PUTTING THE CONCEPTS INTO PRACTICE

PART 1: MODEL AFFIRMATIVE PROCUREMENT PROGRAM FOR NPS

Federal agencies are required to develop an Affirmative Procurement Program (APP)⁶ for EPA designated items under the RCRA section 6002 (c) and (i) and section 402 of Executive Order 13101. Executive Order 13101 calls for inclusion of other environmental products in an agency APP.

This section includes an Affirmative Procurement Program that has been tailored for the National Park Service. It contains the four required elements of APP under the RCRA 6002 and Executive Order 13101 and integrates DOI and NPS specific goals. This *Environmental Purchasing in the NPS, a How-To Guide*, serves as our Region's and the Parks' overall environmental procurement plan. Parks are expected to adopt the APP component of this Guide and make any modifications to meet their specific goals and needs.

The four required elements are:

- **Preference:** Agencies shall institute practices and procedures favoring the specification and procurement of recycled content and other environmental products;
- **Promotion:** Agencies shall actively promote recycled content and other environmental products in their acquisition programs, both internally and externally.
- **Estimation, Certification and Verification:** Agencies shall obtain certifications of the recycled content in the products to be supplied under a contract and to verify those certifications; and
- **Monitoring and Reporting:** Agencies shall establish a procedure for monitoring and tracking EPA designated recycled content products. Agencies shall report on the purchase of these products.

RESOURCE:

- Office of Federal Environmental Executive's website includes a model APP www.ofee.gov. Click on "What's New" and scroll down to "Model Agency Affirmative Procurement Program." Also, refer to *Greening the Government: A Guide to Implementing Executive Order 13101*.
- Department of Energy has developed an excellent and comprehensive APP that can be found at: www.doep2.org/ap/AP2001_toc.htm.
- FAR 23.404 includes a discussion and guidance for designing an APP.

Each of these elements is detailed below.

5.1 Part 1: Preference Program

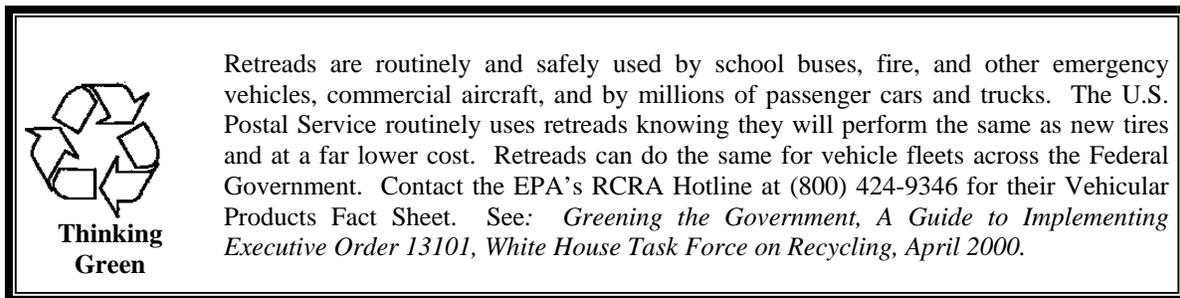
Under Section 6002 of the RCRA, procuring agencies must institute practices and procedures favoring the specification and procurement of recycled content products. Once EPA designates a procurement item, procuring agencies are required to comply within one year of the date the addition to the Comprehensive Procurement Guideline occurs, by purchasing the item with the

⁶ Much of the content of this section is derived from the Office of the Federal Environmental Executive Model Agency, Affirmative Procurement Program as well as the Department of Energy's Final Draft APP.

highest recovered materials content level practicable. As of April 2002, EPA has designated 54 items in the following eight product categories:

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

A full list of EPA-designated items, along with the recommended levels of recycled content for each of the 54 products, is included in Appendix 11.3.8. Since new items are added, NPS personnel should check the CPG website: www.epa.gov/cpg/products.htm for the most updated list.



5.1.1 Affirmative Procurement Goals for Commonly Used Products

Through its strategic plan, DOI has prioritized and established goals for certain CPG items based on common purchases and use patterns within DOI. In addition, the strategic plan also establishes specific purchasing goals for other non-CPG items, such as biobased products. In support of the DOI's waste prevention and recycling goals, NPS is committed to meeting or exceeding the goals stated in the May 2000 *Greening the Interior: Strategic Plan for Greening the Department of the Interior Through Waste Prevention, Recycling and Federal Acquisition* (www.webteam.nbc.gov/green).

Targeting products and services purchased routinely, DOI commits to reach 100% compliance with the following goals, and to improve by at least 30% each year until these goals are achieved (FY 2000 becomes baseline):

- Operate all DOI managed fleet vehicles (owned and leased) using or replacing with:
 - Re-refined engine oil (PWR Director's Memo dated April 21, 1999 prescribes 100% usage).
 - Retread tires (when replacing tires).
 - Reclaimed coolant.
- Facilities stocked with recycled-content items including:
 - Bathroom tissue.
 - Paper towels.
 - Plastic trash bags.
- All DOI facilities use **chlorine free**:
 - Copy paper.
 - All copy paper used by the DOI contains at least 30% post consumer material. NPS-PWR as a member of the Federal Network for Sustainability has established a goal to purchase top three green copier papers in order of preference:
 - 1) Rolland New Life.
 - 2) Eurkea 100!
 - 3) Badger New Leaf.

Information about FNS greener copier paper initiative can be found at: www.federalsustainability.org.
 - Bathroom tissue.
 - Paper towels.
- All new installations at facilities use.
 - Recycled content or factory refurbished carpet.
- On a pilot basis utilize:
 - Biobased, biodegradable lubricating and hydraulic oils in equipment where spills may occur (chainsaws or outboard motors for example).

5.1.2 Waste Diversion Goals

Pursuant to requirements under the RCRA and Executive Order 13101, DOI and NPS have established specific waste diversion goals. Purchasing products made from recycled content or other environmental attributes is an integral component of solid waste management – recycling and waste diversion. By purchasing these products, we not only divert waste from landfills and reduce disposal costs, but we also reduce the pollution created by original resource extraction and manufacturing processes, activities that can contribute to a rise in greenhouse gases and global warming. The goals are as follows:

- DOI will divert solid waste from disposal in landfills through recycling at the rate of
 - 40% by the year 2002;
 - 45% by the year 2005; and
 - 50% by the year 2010.

5.1.3 Acquisition Planning

One of the easiest ways to incorporate recycled content products and environmentally preferable products and services into NPS purchasing decisions is to begin considering environmental performance during the acquisition planning phase. Executive Order 13101 requires agencies to consider the following factors in acquisition planning:

- Elimination of virgin material requirements;
- Use of biobased products;
- Use of recovered materials;
- Reuse of product;
- Life-cycle cost;
- Recyclability;
- Use of environmentally preferable products;
- Waste prevention (including toxicity reduction or elimination), and
- Ultimate disposal.

These factors should be considered in acquisition planning for all procurements and in the evaluation and award of contracts (i.e., the bidder must be able to cost effectively satisfy the recovered material content specifications as well as the performance/design specifications outlined in the procurement solicitation.)

The RCRA specifies three procurement methods as follows.

1. ***Minimum content standards.***

This method identifies the minimum content of recovered material a designated item should contain before being considered for award.

2. ***Case by case procurement.***

This method provides for the open competition between products made of virgin materials and products containing recovered materials with a preference to be given to the latter.

3. ***Equivalent approach.***

This method provides a comparison similar to the use of brand name or equal. The solicitation provides the amount or value to be compared. For example, “recycled paper content must be equal or greater than 50%.”

For most designated items, EPA has determined that the use of minimum content standards will maximize the use of recovered materials. Recommendations for recovered materials content is provided in the EPA-published Recovered Materials Advisory Notices (RMAN's) located at: www.epa.gov/cpg/products.htm.

Depending on the product category, minimum content standards may not be applicable. For example, in the case of remanufactured products, such as retread tires or toner cartridges, EPA recommends that agencies purchase a remanufactured product or contract for remanufacturing services.

5.1.4 The Requirements for Waivers/Non-Purchase Justification

FAR 23.404 (b), Agency Affirmative Procurement Programs, requires 100 percent of purchases of EPA-designated products contain recovered material however, there will be circumstances precluding the acquisition of recovered materials. The RCRA, E.O. 13101, and the FAR require written justification for not purchasing EPA-designated products from the procuring official and the Contracting Officer. The requirements state that written justification needs to be kept on file as well as submitted to the DOI Environmental Executive, but the latter is not in place at this time.

One or more the following circumstances may occur that preclude the acquisition of an EPA-designated item:

- The price may be unreasonable;
- There is inadequate competition;
- The products are unavailable within a reasonable period of time; or
- The products do not meet reasonable performance standards.

The justification form is included Appendix 11.4.1.

5.1.5 Contractors

The buy-recycled requirements apply to contractors when they are purchasing or supplying EPA designated products for use in the performance of a contract. The FAR requires agency Contracting Officers to insert the clause at 52.211-5, Material Requirements, in all solicitations and contracts for supplies that are not commercial items. The FAR also requires agency Contracting Officers to insert the clause at 52.223-10, Waste Reduction Program, in all solicitations and contracts for contractor operation of government-owned or leased facilities and all solicitations and contracts for support services at Government-owned or operated facilities.

Because NPS contractors may procure a majority of the products regulated by EPA's guidelines, NPS Contracting Officers shall ensure that such contractors are familiar with all applicable APP requirements contained in their contracts with NPS. NPS Contracting Officers shall review with appropriate contractors their role in the procurement of recycled content products during the initial

contract signing period and shall reinforce the requirements of the E.O. 13101 with the contractor when appropriate during subsequent meetings and correspondence.

5.2 Part 2: Promotion Program

This section describes both internal and external actions that NPS-PWR will take to promote its Affirmative Procurement Program.

To promote the use of recycled content products and materials procurement, the NPS-PWR will promote awareness to our field operations personnel, procurement officials, supply and requirements personnel, as well as to our charge card purchasers through the following suggested channels:

- Publicize environmental purchasing successes in the PWR *Green Voice* and the service-wide newsletter *Sustainability News* (found at www.nature.nps.gov/sustainability) and the service-wide Environmental Leadership web site www.nps.gov/renew. Include original ideas regarding contracts incorporating environmental considerations.
- Submit articles to newsletters of environmental purchasing programs, such as Closing the Circle Newsletter (OFEE), CPG Newsletter (EPA), EPP Newsletter (EPA).
- Submit articles to trade and professional journal publications.
- Participate in vendor shows and trades fairs.
- Participate in partnership programs. For example, EPA's WasteWise program at www.epa.gov/wastewise.
- Offer workshops and training to park employees.
- Encourage the use of identifying logos and messages.
- Help educate partners, visitors, and concessionaires about the benefits of purchasing environmental products and services.
- Distribute the PWR 100+ Best Management Practices, the Green Janitorial Products and Services Guide and other PWR greening tools as they are developed.
- Share copies of your park Affirmative Procurement Plan.
- Discuss NPS-PWR's Affirmative Procurement Program at pre-award conferences.
- Include statements in solicitations requiring the use of recycled, energy and water efficient, and environmentally preferable products and materials.
- Expand bidder's list to include manufacturers of environmental products and/or limited to manufacturers or vendors of such products.

5.3 Part 3: Procedures for Vendor Estimation, Certification, and Verification

EPA recommends that procuring agencies require vendors to provide an estimate of the total recycled content of their products and certify that the recycled content meets the minimum content standards in the agency's solicitation documents. EPA also recommends that agencies establish procedures to verify vendor estimates and certification. Agencies should verify these estimates and certifications through their normal quality control assurance procedures. Certification is limited to those items above the simplified acquisition threshold of \$100,000 as defined in the FAR 2.1, Definitions. NPS program and procurement offices shall adopt the following procedures.

5.3.1 Estimation

NPS Contracting Officers will include in all solicitations and contracts in excess of \$100,000 the estimation clause FAR 52.223-9. The intent of the estimate is to validate the level of recovered material used in a product. In addition, it may determine if the product is available with a greater percentage of recovered material than currently required. If an item is available with a higher recycled content, the agency has the opportunity to revise the content standards.

5.3.2 Certification

Contracting Officers shall assure that vendors:

1. Provide written certification that their products meet the minimum content standards in the solicitation documents;
2. Maintain copies of certification documents;
3. Produce copies of the written certification upon request by NPS-PWR Environmental Purchasing Coordinator.

Currently, FAR contains a "Recovered Certification" provision (FAR 52.223-4), which NPS Contracting Officers shall insert into solicitations for recycled content products and into solicitations that will require the use of EPA-designated products during performance of the contract.

5.3.2 Verification

DOI's Environmental Executive and NPS-PWR Environmental Purchasing Coordinator shall periodically review vendor certification documents as part of their review and monitoring process. The following table summarizes the required certifications.⁷

⁷ The RCRA section 6002 and FAR 2.1 Definitions

<u>CERTIFICATION</u>	<u>REFERENCE</u>	<u>USE</u>
Recovered Material Certification	FAR Clause 52.223-4	<ul style="list-style-type: none"> ▪ Solicitations that specify the use of recovered materials. ▪ Offeror certifies that the products offered meet the minimum content level required in the solicitation.
Estimate of Percentage of Recovered Material Content for EPA-Designated Products	FAR Clause 52.223-9	<ul style="list-style-type: none"> ▪ Contracts exceeding simplified acquisition threshold and specify use of an EPA designated item. ▪ Certifies product contains percentage of recovered/post consumer materials required. ▪ Estimates the percent of recovered materials actually in the product.

5.4 Part 4: Review, Monitoring, and Reporting Program

Annual review and monitoring is the last required element in an Agency Affirmative Procurement Program. This process is currently in the development stage for DOI and NPS.

5.4.1 CPG Tracking Worksheet

Currently, there is no NPS reporting program in place to capture information about environmental product purchases. The Federal Procurement Data System Individual Contract Action Report (SF-279) does include questions about use of EPA-designated products and use of recovered materials and waste reduction clauses but these questions do not capture quantities of environmental product purchases. In addition, SF-279 is only required for contracts exceeding \$25,000.

Thus, a tracking worksheet has been developed by the NPS-PWR to record information on the dollar amounts of purchases, by CPG category, as well as reasons for non-procurement of EPA-designated products or services. This worksheet will be used in selected parks on a pilot basis in 2002.

The draft CPG Tracking Worksheet is included in Appendix 11.4.2. A copy of SF 279 is included in Appendix 11.4.4. For additional information, including updates about the pilots, contact Sonya Capek (Sonya_capek@nps.gov) or Jamie Sherrill (jamie_sherrill@nps.gov).

5.4.2 Resource Conservation and Recovery Act Compliance Inspections

Section 403 of Executive Order directs EPA to develop guidance for inspections of Federal facilities for compliance with the affirmative procurement requirements of the RCRA Section 6002. The guidance (located at www.ofee.gov, click on EO 13101, scroll down to *Guidance*) is to be used by EPA in conducting the RCRA or multi-media inspections that include a component of the RCRA. The Executive Order further directs EPA to encourage states authorized to conduct the RCRA inspections to use the guidance and evaluate Federal facility compliance with the RCRA Section 6002.

In 1999, EPA began conducting inspections of Federal facilities to evaluate compliance with CPG requirements. Parks can become familiar with inspection requirements by completing the Facilities Questionnaire contained in the EPA Inspection Guidance. PWR parks should also revise internal environmental compliance assessment programs to include the RCRA Section 6002 compliance review protocols.

6.0 PUTTING THE CONCEPTS INTO PRACTICE

PART 2: PROCEDURES FOR REQUISITIONERS AND CONTRACTING OFFICERS

The responsibility for preparation, implementation, and monitoring of environmental purchasing needs to be shared among the program personnel and acquisition and procurement personnel. This section provides suggestions and tips for how environmental factors can be integrated into the purchasing process.

6.1 Procedures for Procurement Requisitioner

- Incorporate environmental considerations in your Individual Acquisition Plan. A sample Individual Acquisition Plan (IAP) form is provided in Appendix 11.4.3.
- Define product specifications.
 - Verify minimum content standards.
 - Check for DOI and NPS-specific product goals listed in 5.1.1.
 - Check mandatory sources for availability of CPG items and other environmental products.
 - Check EPA’s EPP database (www.epa.gov/oppt/epp/database) for ideas on other environmental standards or criteria that can be incorporated into specifications.
 - Exclude requirements which may limit certain environmental products. For example:
 - Do not impose “brightness” standards for paper products, which may preclude the use of unbleached paper.
 - Discourage use of plastic coated paper products which may make the product not recyclable.
 - Eliminate requirements requiring the use of virgin materials.
 - Eliminate over-specifying without compromising performance. For example, avoid specifying clear plastic trash bags, otherwise you may eliminate recycled-content trash bags that are often darker or opaque in color.
- Complete Statement of Work (SOW) to include:
 - Comprehensive Procurement Guide-line Items.
 - Energy efficient and water efficient products.

ENVIRONMENTAL FACTORS IN SOW

The Main Interior Building custodial contract required the technical proposal to encompass a separate environmental preferability submission. The solicitation spelled out (in Section L) what was required in the environmental preferability submission, such as mandatory and desirable characteristics for chemical cleaning products, as well as a wide range of janitorial products. It also required the offerors to submit a waste minimization and recycling strategy.

Furthermore, in awarding the Main Interior Building Custodial Service Contract, DOI assigned one third of its overall evaluation on a wide range of environmental factors. For a short case study of this contract with links to the contract language and evaluation worksheets, see:

www.epa.gov/oppt/epp/ppg/case/doicase.htm

- Environmentally preferable products and services.
- Waste reduction/recycling requirements.
- Provision for offerors to demonstrate environmental commitment.
- Evaluation factors that prioritize environmental considerations.
 - Be sure to give sufficient weight to environmental factors in the overall evaluation.
 - Remember to work with your COTR on this!
- Mechanisms for tracking CPG items and other environmental products specified in the contract.
- Service contracts should also contain language promoting the use of environmental alternatives. For example:

- Janitorial service providers should use only recycled paper towels containing a minimum of 40% post-consumer content and recycled toilet paper containing a minimum of 20% post-consumer product. (See CPG listing for current content requirements).
- Cleaning products should be offered showing less-toxic options available and the impact on price.
- Offerors may include alternative products or recycled content levels for the proposed products, demonstrating the green effect and price for the effort.
- Performance Based Statements of Work are excellent contracting tools for services such as janitorial, trash collection, and landscaping.

Section 7.0 includes a more detailed discussion of how to integrate environmental factors into service contracts, including construction and Architect-Engineer contracts.

- If applicable, complete the *Exemption Justification Form for Not Acquiring EPA-Designated CPG items for Recycled Content Products*. The justification form is available in Appendix 11.4.1.
 - Forward copy of all waivers for not using CPG to the local Contracting Officer or Environmental Purchasing Coordinator within 30 days for annual reporting purposes.
- Evaluate offerors and award based on specified environmental criteria.
- Monitor the contract to ensure that environmental provisions are implemented.
 - Obtain from contractor the amount of CPG items purchased under service contract.

GREEN UNIFORMS FOR NPS

In issuing the Multiagency Uniform Program Contract in 2000, NPS included a number of environmental features, including a requirement for the vendor to provide online catalogs, ordering, and invoicing to reduce the tons of paper and ink previously used for paper catalogs, order forms, and invoices. For more details of this contract, check the article featured in EPA's *EPP Program Update*:
www.epa.gov/oppt/epp/pdfs/update7.pdf.

MAKING ENVIRONMENTAL CONSIDERATION A PART OF ROUTINE PRACTICE THROUGH IAPs

An Individual Acquisition Plan is required for every purchase exceeding \$25,000. The IAP stage is an excellent time to consider and incorporate environmental products and approaches. Currently, IAP includes a question on

whether or not sustainable practices will be incorporated into the specification with a “no” response requiring an explanation.

6.2 Procedures for the Contracting Officer

- Promote environmental considerations in the solicitation process.
 - Ensure solicitation includes appropriate FAR Clauses. A list of environmental FAR provisions is provided in Section 6.3 and in Appendix 11.5.
 - Use market surveys to gather information about environmental aspects of products and identify potential vendors of environmental products and services.
 - Share information about CPG items, environmentally preferable products and services with procurement originator if SOW does not contain environmental aspects.
 - Assist Procurement Requisitioner to develop evaluation criteria that reflects environmental criteria.
 - Consider life cycle costs.
- Use innovative contracting techniques to encourage contractors to identify and use CPG and environmentally preferable products.
 - Consider incentives such as an agreed upon amount for the contractor exceeding minimum content standard.
 - Consider using best value procedures and ensuring that environmental criteria get built into evaluation factors.
 - Consider giving a preference to bids offering recycled content or other environmental characteristics, or award additional points based on the level of recycled content offered in the proposal.
- Ensure flow-down of APP program requirements to contractors/subcontractors that will be purchase materials on behalf of the Government.

BEST VALUE CONTRACTING

Best value contracting allows for using any one or a combination of source selection approaches and may provide NPS with an opportunity to include environmental considerations in determining what is “best value” to the government. In different types of acquisitions, the relative importance of cost or price may vary. A tradeoff process is appropriate when it may be in the best interest of the Government to consider award to other than the lowest priced offer.

Inclusion of factors to weigh the utilization of green products or specific environmental contracting processes can be used to meet the requirements of the law and executive orders. The instructions for submitting offers can include requirements to identify specific products that meet CPG or other definitions and how they will be used in the performance of the contract. The relative importance of factors other than price must be included in the solicitation for acquisitions exceeding the simplified acquisition threshold (SAT). For acquisitions under the SAT the prospective vendors must be informed of the basis for award, and sound environmental practices can be one of the award factors. The entire process can lead to a variety of contract types.

- Maximize the use of recycled, energy and water efficient, and environmentally preferable products and materials in offers by asking the following questions:
 - How have requirements for virgin materials been eliminated in this contract?
 - How will this contract promote the reuse of products?
 - How does this project include the use of biobased products?
 - How does this contract incorporate the use of recovered materials, including CPG items?
 - How does this contract specify the use of environmentally preferable products?
 - Are life-cycle costs accounted for in the project design? How?
 - How does this project promote the use of products that are recyclable?
 - How will waste minimization be incorporated in the specification?
 - How will this contract specify use of less toxic products?

6.3 FAR Coverage Applicable to Environmental Purchasing

A summary of the relevant FAR (Federal Acquisition Regulation) coverage follows:

At FAR Part 2, Definitions:

- Provides definitions for:
 - Energy-efficient products
 - Pollution prevention
 - Environmentally preferable
 - Recovered material
 - Virgin material

At FAR Part 4, Administrative Matters:

- Restates preferences for double-sided printing on recycled paper for all contractor documents.

At FAR Part 7, Acquisition Planning:

- Part 7.103(n) now requires agency heads to ensure “that agency planners specify needs and develop plans, drawings, work statements, specifications, or other product descriptions promoting the use of environmentally preferable products and services (e.g., promoting energy conservation and the use of recovered material content...).”
- Part 7.105(b)(16) also requires written acquisition plans to: “discuss all applicable environmental and energy conservation objectives associated with the acquisition....”

At FAR Part 11, Describing Agency Needs:

- Agencies must consider use of recovered materials, environmentally preferable purchasing criteria developed by EPA, and environmental objectives when developing specifications and standards describing government requirements and developing source selection factors.
 - Subpart 11.3 addresses the use of recovered materials and used, reconditioned, or remanufactured parts.
 - Subpart 11.303 addresses the 30% post-consumer content standard for printing and writing paper established by E.O. 13101.

At FAR Part 12, Acquisition of Commercial Items:

- Part 12.301 (e) (3) states that the Contracting Officer may use the provisions and clauses contained in Part 23 regarding the use of recovered material when appropriate for the item being acquired.

At FAR Part 13, Simplified Acquisition Procedures:

- 13.201(f) clearly states that environmental procurement requirements applies at or below the to micro-purchases threshold.

At FAR Part 23, Environmental Considerations:

- FAR 23.403 Policy. The government's policy is to acquire, in a cost-effective manner, items composed of the highest percentage of recovered materials practical, consistent with maintaining a satisfactory level of competition, without adversely affecting the performance requirements or exposing suppliers' employees to undue hazards from the recovered material.
- FAR 23.404(b)(3) requires written determinations for acquisition of EPA-designated items that do not meet the EPA minimum recovered material standards.
- FAR 23.405 Procedures requires that Contracting Officers refer to EPA's list of designated products and to their agencies affirmative procurement programs when purchasing supplies that contain recovered material or services that could include supplies that contain recovered material.
- FAR 23.706 adds a new requirement for support service contractors at a government-owned or operated facility must develop programs for waste reduction and affirmative procurement.

At FAR Part 36, Construction and Architect-Engineer (A&E) Contracts:

- FAR 36.602-1 provides selection criteria for A&E firms, requiring specialized experience and technical competence in energy conservation, pollution prevention, waste reduction, and the use of recovered materials as appropriate.

At FAR Part 42, Contract Administration:

- Addresses the environmental concerns that must be incorporated into contract administration functions.

At FAR Part 52, Solicitation Provisions and Contract Clauses:

- FAR 52.204-4 requires documents to be printed or copied double-sided on recycled paper.
- FAR 52.211-5 Material Requirements, applies to non-commercial items and requires disclosure of materials in proposal.
- FAR 52.223-4 Recovered Material Certification, requires offerors to certify that the products offered meet the minimum content level required in the solicitation.
- FAR 52.223-9 requires an estimate of percentage of recovered material content for EPA-designated products for contracts exceeding simplified acquisition threshold and specifies use of EPA designated item(s).
- FAR 52.223-10 Waste Reduction Plans.
 - Requires contractors to establish a program to promote cost-effective waste reduction in all operations and facilities covered by contract.
 - Applies to Government-owned or leased facilities.

7.0 PUTTING THE CONCEPTS INTO PRACTICE

PART 3: GREENING SERVICE AND CONSTRUCTION/ARCHITECT-ENGINEER (A&E) CONTRACTS

The concepts and ideas covered thus far in this Guide are applicable to procurement of both products and services. However, integration of environmental considerations into service contracts, including construction and Architect-Engineer contracts, will require slightly different approaches. Since many of the parks are engaged in a wide range of projects that require service contracts, such as waste collection and disposal and janitorial services, as well as small to medium-sized construction and renovation projects, this section focuses on how environmental factors can be integrated into service, construction contracts, and Architect-Engineer (A&E) contracts.

7.1 Construction and Architect-Engineer (A&E) Contracts

The sections of FAR addressing acquisition planning (FAR Part 7), design requirements, and A&E firm selection (FAR Part 36) all provide for the specification and use of resource efficient, recycled content, and environmentally preferable products in the requirements documents and work statements.

There are three primary methods of acquisition: sealed bidding, negotiation, and the use of Simplified Acquisition Procedures. These three methods use a distinct form of solicitation for each: An Invitation for Bids (IFB) for sealed bidding; a Request for Proposals (RFP) for negotiations; and a Request for Quotes (RFQ) for acquisitions under the Simplified Acquisition Threshold of \$100,000. Contract award is based on either low bid, Best Value, or a combination of the two. Both the contracting method and contract selection procedures (e.g., low bid or Best Value) will have important implications for how environmental considerations could be integrated into construction projects. Appendix 11.6.1 includes some pros and cons associated with different contracting approaches. Appendix 11.6.2 includes a list of contract considerations to increase sustainability.

No matter what contracting method is used, an important first step is ensuring that environmental and other sustainable considerations are integrated and reflected through all phases of the project, particularly the planning stages, by engaging the appropriate staff with specialized expertise.

USING A&E SERVICES

FAR Part 36 covers selection and use of Architect-Engineer (A&E) firms for the development of construction projects. Listed below are a few basic ideas to keep in mind when developing a scope of work for an A&E firm who will be designing your construction projects.

- Suggest that an architect/engineer with positive environmental construction experience be assigned at the procurement strategy stage.
- Include significant environmental or sustainability experience in specifying sustainable building materials as a selection factor (A&E and construction) in any advertising (e.g., Federal business opportunities).
- Include environmentally preferable engineering requirements with Value Engineering (VE) studies.
- Integrate the environmental FAR requirements into the processes from the beginning.
- Require A&E to include CPG and EPP principles contained in this document.
- Include provision for contractors to report on purchases of environmental products.

A pre-construction meeting with the contractor and government technical group, including the Contracting Officer and the Contracting Officer's Representative, provides the best opportunity to confirm the expectations that were articulated in the specifications relative to this provision. This meeting should include a review and discussion of goals related to the Solid Waste Management and Environmental Protection Plans. These are found in Construction Specification Institute (CSI) Section 01505 and include:

- Procedures to be implemented to provide the required environmental protection and to comply with applicable laws and regulations;
- A list of recycling facilities, reuse facilities, municipal solid waste landfills, and other disposal area(s) to be used;
- Procedures for recycling/reuse programs;
- Procedures for rebate programs, if applicable; and
- Responsibilities of the contractor for providing reporting data.

7.2 Non-Construction Service Contracts

FAR part 37 addresses service contracts. Performance Based Service Contracts (for example, Janitorial, Landscaping, and Waste Management) offer excellent opportunities to obtain environmental attributes in the objectives and measures of a Performance Based Service Contract that might not otherwise be obtained under a regular service contract.

7.3 Environmental Factors in Solicitations

Language promoting the use of environmental products and services can and should be integrated throughout the contract. Most traditionally, project managers have focused their efforts on *Section C, Work Statements*. This is certainly one of the main sections where environmental aspects need to be specified. Other key sections include *Section L,*

NPS RESOURCES FOR SPECIFICATION WRITERS

The specifications writer should identify materials manufactured with recovered content or other environmental attributes that are to be used in performance of the work or incorporated into the project work. Some suggested tools and resources include:

NPS-PWR DIRECTIVE PW-048 SUSTAINABLE DESIGN AND CONSTRUCTION PRACTICES

This Directive addresses sustainable design and construction practices. The Directive states that implementing sustainable design and construction practices is the constant process of identifying and incorporating activities and actions during facility planning, design, construction, and operation. <http://165.83.71.10/maintenance/directives.htm>

GREEN GUIDE SPEC

NPS-PWR is working to incorporate sustainable design methods and technologies into NPS construction guide specifications. The specifications are being written in standard CSI format so they will be familiar and easy to read for those writing a project's specs. If you would like to use the green guide spec in a design, construction, deconstruction, demolition, or renovation project, please call Joe Dunstan at joe_dunstan@nps.gov. Thus far, sections that have been "greened" include:

- 01505 Construction Waste Management
- 02210 Deconstruction of Buildings, Pavement, and Structures
- 02220 Demolition of Buildings, Pavement, and Structures
- 07210 Building Insulation
- 09251 Gypsum Wallboard
- 09310 Ceramic, Porcelain, Cement, Clay, and Stone Tiles
- 09510 Acoustic Panel Ceilings
- 09550 Wood Flooring
- 09650 Resilient Flooring
- 09680 Carpet
- 09900 Painting
- 06100 Rough Carpentry
- 06102 Wood Treatment
- 06200 Finishing Carpentry

The PWR revised CSI green guide spec should be used for in-house or smaller construction projects. For larger construction projects requiring A&E services, the environmental requirements should be written into the SOW because all specs would be the A&E's responsibility to develop.

Instructions, and *Section M, Evaluation Factors*. In addition to these sections, there are opportunities for both project managers and the Contracting Officers to work collaboratively to reflect NPS environmental commitment in many of the other provisions in the contract. Some tips and examples are discussed below. It should be noted that although the examples included are drawn from construction and A&E contracts, the tips are applicable for all types of product and service contracts.

7.3.1 Section C: Statement of Work (SOW) and Specifications

A successful specifications document informs contractors of NPS commitment to environmental purchasing and sustainability. It is important to clearly set expectations and include specific criteria that would be used to evaluate products. Below are some tips on writing environmentally preferable specifications and work statements.

- A focus on performance objectives, rather than only specifying a certain product(s), will help ensure you are not precluding a vendor from providing environmental products.
- Identify and list criteria for environmental product selection, such as recovered materials content, energy efficiency, or lower toxicity, and reflect the price impact of these alternatives.
- Pre-bid/proposal/quote conferences with the industry representatives can help to ensure the solicitation goals are attainable and to explore other avenues of environmental purchasing.

WASTE REDUCTION PLANS IN CONSTRUCTION, DEMOLITION AND DECONSTRUCTION CONTRACTS

FAR Clause 52.223-10 requires contractors to establish a program to promote cost-effective waste reduction programs in all operations and facilities covered by a contract. Program managers and Contracting Officers should refer to NPS-PWR Revised CSI Green Spec. Relevant provisions include:

- 01505 Construction Waste Management
- 02210 Deconstruction of Building, Pavements and Structures
- 02220 Demolition of Buildings, Pavements and Structures

In addition, Appendix 11.6.3 includes specific examples of contracts from other government organizations that have incorporated waste plan requirements.

Within construction contracts, one of the best opportunities to communicate NPS commitment to environmental purchasing and sustainability is through both a clear and specific Statement of Work (SOW), and the specifications for construction documents. The level of expectation from the NPS is spelled out in the design requirements. Although A&E firms will develop their own environmental specs, it is imperative that the NPS directs the A&E to use environmental design and construction practices in these specifications. Environmental requirements must be integrated into the relevant CSI (Construction Specification Institute) specs. Each relevant CSI Section must be clear and specific for environmental considerations and include Section 01505, Construction Waste Management. All components of Division 01505 should be reviewed by the contractor and Contracting Officer/Government technical group at a pre-construction meeting.

SALE OF DECONSTRUCTION MATERIALS

Public Law 106-58, section 607, allows Federal agencies the ability to retain funds generated by recycling programs. Funds may come from the sale of materials recovered through recycling or waste prevention programs and are to be used in the park waste prevention and recycling program.

MORE RESOURCES FOR SPECIFICATION WRITERS

- ***United States Postal Services Green Specs:*** An electronic specification package listing green alternative specifications organized according to the CSI Master Format system. Specific sections can be adapted and improved to meet the specific requirements and needs of individual parks. Updated annually and available for \$25 from Corporate Visions Inc. (202-833-4333).
- ***GSA Green Lease:*** In its Green Lease, GSA has Solicitations for Offers (SFO) paragraphs that can be applied to contract language/specs for construction projects, not just leases. It includes such items as standards for indoor air quality/VOCs, building materials, adhesives, construction waste management, wood products, janitorial services, painting, and references the CPG throughout. It could serve as a baseline to be strengthened further if so desired.
- ***Leadership in Energy and Environmental Leadership (LEED)*** is a system for designing, constructing, operating and certifying green buildings. Its system of “credits” for certification includes a number of sections (e.g., materials and resources) that can be used as a benchmark for selecting products and services. Online access is at: www.usgbc.org/programs/index.htm. PWR Directive 48 recommends that LEED be used as a checklist to incorporate green building design and materials into specifications.
- ***Alameda County*** Waste Management Authority’s “*Home Remodeling Green Building Guideline*” and “*New Home Construction Green Building Guideline*” are located at: www.stopwaste.org/fsbuild.html. These user-friendly guidelines may be the best external resource to date.
- ***Environmental Building News*** is a subscription-based resource that provides articles, reviews, and news about energy-efficient, resource-efficient, and healthy building practices. Online access is located at: www.BuildingGreen.com
- ***EPA*** has examples of contract language and specifications for green products, including construction products. This data can be found online at the EPP Database: 7 will assist construction designers and contractors to include green products and materials in the building process.
- ***EPA’s Promising Practices Guide*** www.epa.gov/oppt/epp/ppg includes 16 short case studies highlighting successful strategies for incorporating environmental factors into a variety of products and service contracts (including a number of construction projects). It has direct links to the contract language as well as evaluation worksheets used by the organizations.

THREE STEPS TO GREENING PROJECT SPECIFICATIONS

Green building specifications can help create more sustainable, healthy, and environmentally sensitive buildings. Specifiers should consider greening specifications in three areas: (1) procedures, (2) products, and (3) applications.

Procedures: In Division 1, state the project's environmental goals and the general environmental procedures that address healthy indoor air quality, environmental construction techniques, building component reuse, and construction recycling. Include references to government and industry environmental standards and requirements. List specific chemicals to be avoided and material types to be reused, salvaged, or recycled.

Products: Incorporate green building products and materials in their respective CSI sections. Include the qualities that make the products environmentally responsible, such as low toxicity, minimal chemical emissions, recycled content, and environmental installation procedures. Include specific environmental product characteristics such as toxic chemicals the product does not contain (e.g., no formaldehyde) or the product's post-consumer recycled content.

Applications: Review the entire project specifications and include explicit environmental procedures to be followed even when installing conventional products, such as using low-VOC adhesives or no-VOC mechanical methods of attachment. During this review process, eliminate procedures that conflict with the project's environmental goals and the general environmental procedures listed in Division 1. From *The Construction Specifier*, October 99, p. 53, by Lynn M. Froeschle. (email: LFroeschle@aol.com.)

For full text: www.csinet.org/xp/p-cs/i-current/a-940367539/article.view.

7.3.2 Section G: Contract Administration Requirements

Section G usually details the responsibilities of the COTR (Contracting Officer's Technical Representative), payment information, and other contraction administration details. The FAR at 42.302 contract administration functions, includes paragraph (a)(68) "*monitor the contractor's compliance with the requirements of environmental laws including the Resource Conservation and Recovery Act (RCRA) and other environmental requirements as specified in the contract...*" The FAR provision further articulates the specific responsibilities of the Contracting Officer:

Verification of contractor compliance with specifications requiring the use of environmentally preferable and energy-efficient materials and the use of materials or delivery of end items with the specified recovered material content. This shall occur as part of the quality assurance procedures set forth in Part 46 and shall be identified in Section 01300 – Submittals.

7.3.3 Section L, Instructions, Conditions, and Notices to Offerors

In other than sealed bidding, Section L, Instructions to Offerors, traditionally includes three parts: a request for a technical proposal, a cost proposal, and past performance, experience, and references. Environmental considerations should be factored into the instructions for the technical proposal as well as past performance references.

Past Performance References: In their “Experience and Past Performance Report, offerors should be requested to provide, their familiarity with the scope of work as described in the plans and specifications, and their comparative experience and past performance with sustainability. For example:

*In order to demonstrate its commitment to using environmentally preferable materials and methods during construction, the offeror must show how they intend to minimize construction waste and maximize recycling; in addition, they must show how they would identify and purchase environmentally preferable products. The offeror shall also include a construction waste management plan for the materials that are to be reused and recycled. This plan shall indicate what materials will be reused or recycled in order to minimize landfill disposal.*⁸

7.3.4 Section M, Evaluation Factors for Award - Sample Language

In other than sealed bidding, Section M, Evaluation Factors for Award, should include specific provisions to promote environmental purchasing. Project managers and the contracting officials should work collaboratively to assign appropriate criteria and weight to environmental requirements contained in the Statement of Work and articulated in Section M. Specific mention should be made that the technical selection process will be based on the evaluation of the information provided by the offeror in the technical proposal, including responses to specific environmental requirements. Refer to www.epa.gov/oppt/epp/ppg/case/doicase.htm for an example of how environmental requirements could be articulated.

In evaluating past performance, NPS contacts references provided by the offeror and other sources including: Federal, State, and local government agencies, better business bureaus, published media, and electronic data bases.

Experience in sustainability could be demonstrated by the following evaluation criteria:⁹

Experience. Experience is the direct participation in comparable projects, including, but not limited to:

Demonstrated experience using environmentally sustainable materials and methods during construction.

<p>EVALUATION CONSIDERATIONS IN A&E CONTRACTS</p> <p>FAR 36.602-1, Selection Criteria, provides guidance for Agency evaluation of potential contractors as they relate to:</p> <ul style="list-style-type: none"> ▪ Professional qualifications. ▪ Specialized experience and technical competence in: <ul style="list-style-type: none"> ○ Energy conservation and passive energy design ○ Pollution prevention, ○ Waste reduction, ○ The use of recovered or environmentally preferable materials, as appropriate, and ○ Deconstruction experience. ▪ The capacity to successfully accomplish effort. ▪ Past Performance. ▪ Location. <p>See PWR A&E criteria in Appendix</p>

⁸ Excerpted from Section L of the Request for Proposal to Replace Entrance Station at Hawaii Volcanoes National Park.

⁹ Excerpted from Section M of the Request for Proposal to Replace Entrance Station at Hawaii Volcanoes National Park.

7.3.5 Additional Sections

In addition to the tips and examples outlined from Sections C, G, L, and M, project managers and COTRs can ensure NPS environmental commitment is articulated in other sections of a solicitation. Included below are some ideas and examples.

Section D, Packaging and Marking - This section can require that all packaging and marking conform to the Comprehensive Procurement Guideline. One example is industrial paperboard (such as tubes, cores, drums, corrugated containers, and padded mailers), but check www.epa.gov/cpg/products/paper.htm for a complete listing.

Since construction projects can result in large volumes of packaging materials, a contract should also specify or encourage reduced packaging, that packaging be recycled, and/or that there is a take-back system for the materials.

Section I, Contract Clauses - Project managers and COTRs should ensure that relevant environmental provisions of FAR are included in any solicitation. A complete list of the FAR provisions is included in Section 6.3 of this Guide. Appendix 11.5 includes excerpts from FAR and it can be located at: www.acqnet.gov/far.

Section J, List of Documents, Exhibits and other Attachments – This section usually includes mandatory environmental policies, regulations, and resources. Project managers and COTRs ensure that the appropriate and relevant resources dealing with environmental purchasing and sustainable buildings (e.g., E.O. 13101, PWR Directive 048) are included as an attachment.

Section K, Representations, Certifications and Other Statements of Offerors – For projects over \$100,000, offerors are required under FAR Clauses 52.223-4 and 52.223-9 to provide written estimation and certification that their products meet the minimum content standards in the solicitation document. COTRs should ensure that this provision is included in Section K if appropriate.

8.0 TIPS FOR ENVIRONMENTAL PURCHASING (INCLUDING PURCHASES WITH THE GOVERNMENTWIDE COMMERCIAL PURCHASE CARD)

All environmental purchasing requirements under the RCRA, E.O. 13101, and FAR apply to micro-purchases, including purchases made using the governmentwide commercial purchase cards. Micro-purchases of CPG items count toward DOI goals and should be reported. Charge card users can check the listing of CPG products included on the handy bookmark checklist that is being distributed to Parks along with this Guide. The individual cardholder is requested to track these purchases at the time they reconcile their monthly billing statement. One of the questions in the PWR Cardholder Administrative Review asks “Is the cardholder aware of the CPG list (www.epa.gov/cpg) and does s/he purchase environmentally friendly, green, when possible?”

NPS personnel have the opportunity to help the environment while buying products that meet our program’s needs. The government directs Federal agencies to buy products that are made with recycled content, have less packaging, are energy efficient, do not create hazardous waste, and incorporate other environmentally preferable attributes. The following tips are designed with a charge card user in mind, but they can be applicable for all types of purchases to help any purchaser meet the NPS environmental commitment.

RESOURCE

NPS personnel should check for additional tips and information about how to buy green when using the government charge card at: www.smartpay.den.nps.gov. In addition, DOI mandatory charge card training references environmentally preferable products at: www.doi.gov/pam/chargecard.

1. Buy Products with Recycled Content

- *Buy products designated by EPA’s CPG program.*

Whatever your job, it is likely that you will be asked to order a product that has been designated in the CPG. Supply Clerks, Secretaries, and Administrative Officers order copy paper, file folders, remanufactured toner cartridges, writing tablets, envelopes, plastic office supplies, shipping and mailing products, awards and plaques, and other products we typically use every day. Fleet managers and users of fleet vehicles purchase automotive products like motor oil, tires, and engine coolant. Hazardous-Materials Coordinators may buy spill containment products. Facility Managers and Safety Officers may buy signs, pallets, parking stops, traffic cones, park benches and picnic tables, and a variety of construction, building and landscaping products. All of these products can be made with recycled content and are likely to be an EPA-designated item.

For products that have been designated by EPA, you should buy those that contain recycled content as long as they are available, meet your performance needs and are cost-competitive. Users of this Guide should check the CPG program website: www.epa.gov/cpg/products for the latest listings of EPA-designated items and recommended levels of recycled content. The website also includes manufacturers, suppliers, and helpful national specifications.

FINDING SMALL BUSINESSES THAT OFFER CPG ITEMS

The Small Business Administration maintains a website called PRONET that has a Green section which allows you to search for vendors in the NAICS (previously SIC codes) for CPG items. The green codes are located at: www.pro-net.sba.gov/cgi-bin/closemesba.pl?TO=http://pro-net.sba.gov/pro-net/greenstuff.html. Choose an NAICS code of interest to access green vendors at: www.pro-net.sba.gov/pro-net/search.html.

- ***Buy CPG items from a mandatory source.***

The JWOD (Javits-Wagner-O'Day) Program is a mandatory source. Many JWOD products already meet environmental purchasing criteria, including CPG. Some common items that meet CPG requirements include: clipboards, notebooks and binders, hanging file folders, paper towels and napkins, steno pads, pens, and pencils. Green janitorial products are also now available from JWOD. Check out: www.JWOD.gov.



Thinking
Green

The JWOD Program teamed up with the DOI and the EPA in signing a Memorandum of Agreement (MOA). The goals of the MOA are to maximize Federal agency purchases of environmentally preferable products and services, and purchasing the same from the JWOD Program. The agreement also enhances already existing JWOD Program initiatives implemented in response to Executive Order 13101.

In accordance with the MOA, Blind Industries and Services of Maryland (BISM), a JWOD-participating nonprofit agency, opened the first green Office Supply Store and the first JWOD Program Supply Center at a Presidential cabinet-level facility. All products stocked in the store, located at the DOI's Washington, D.C. headquarters, were screened to ensure the highest environmental attributes.

For a full text of the MOA and other information about this initiative, check EPA's EPP Update #7 & #8 located at: www.epa.gov/oppt/epp/docupdates.htm.

- ***Rely on existing information resources to buy recycled products which are not on the CPG list.***

Numerous resources exist to help you buy recycled. For example:

- Ask your current vendors whether products are available with recycled content.
- Check General Services Administration's (GSA) "Environmental Products Guide," which includes a wide range CPG-designated items as well as other products made with recycled content. You can order a copy of at: www.pub.fss.gsa.gov/environ.
- There are websites devoted to different product categories, e.g., paper, cleaning products, for example.
- Postings on the EPPNet, a listing service dedicated to environmental purchasing, can yield helpful hints and specific vendor suggestions. Click on www.nerc.org/eppnet.html.

- Many state and local governments also have well-established programs for recycled product purchasing and can be an invaluable resource for leads on recycled content products available. The Government Purchasing Project website includes a complete list of state and local buy recycled programs.

RESOURCE: NORTHEAST RECYCLING COUNCIL (NERC) EPPNET

The Northeast Recycling Council (NERC) established EPPNET, the Environmentally Preferable Products Procurement Listserv, to link Federal, state, local, and private procurement and environmental officials charged with purchasing environmentally preferable products and developing policies for the procurement of these products.

The NERC EPPNET is intended to provide this group with quick access to information such as: availability of product specifications, lists of vendors for particular products, pricing information, strategies to achieve recycled product procurement goals, and Federal procurement policies. Online access at: www.nerc.org/eppnet.html.

2. Buy Products Identified in PWR Environmental Purchasing Fact Sheets

A wide range of products has been researched for their environmental impacts and vendors by NPS-PWR. A sample list of products covered by the fact sheets include:

- Biobased lubricants
- Cabinets
- Carpet
- Certified wood products
- Plastic trash bags
- Plastic lumber
- Lead-free, water-based paint and traffic paints
- Green janitorial products

To receive a copy of any of these reports, please contact NPS Pacific West Region, Solid Waste Coordinator, Sonya Capek at 206-220-4271 or sonya_capek@nps.gov. Many of these reports can also be accessed at: <http://pfmd.nps.gov/HAZMAT/>.

3. Look for the Energy Star Label

When buying products that use energy (computers, copiers, fax machines, multitasking devices, document scanners, TV/VCRs, refrigerators, for example), look for the Energy Star label, that tells you that the product is energy efficient.

- Check EPA's Energy Star Products web site at: www.energystar.gov.
- Call the Department of Energy's Federal Energy Management Program for the latest recommended levels of energy efficiency for products which may not have the Energy Star label, but which are covered by FEMP's program (1-800-DOE-EREC or 1-800-363-3632).

4. Buy Products that Minimize Hazardous Materials and Toxic Chemicals

- Ask if the product contains hazardous materials or toxic chemicals.

➤ Examples include cleaning products containing petroleum-based solvents or acids, paints containing heavy metals, certain organic materials (e.g., formaldehyde, benzene) or high levels of volatile organic compounds (VOC). Other examples include adhesives used for carpet installation or caulking materials with VOCs and other hazardous materials.

- Make every effort to find less toxic or non-toxic substitute products.
- If you have to buy products with hazardous materials (such as laboratory chemicals), notify your facility safety or environmental compliance manager before you purchase the item. If this is a new chemical at the facility, they may require you to get a Material Safety Data Sheet; or there may be special worker safety, recycling, or disposal procedures that you will need to follow.

Battery-operated portable electronic devices such as cell phones, laptop computers, walkie-talkies, and tools often use rechargeable Ni-Cad batteries which contain cadmium, a hazardous material.

- If you buy products with Ni-Cad batteries, ask for batteries with the Battery Recycling Seal (see graphic).



- If you use a product that uses Ni-Cad batteries, recycle these at the end of their useful life so they don't end up in a landfill.
 - You can contact your safety/environmental compliance manager for assistance.
 - Information for consumers on how and where to recycle their used Ni-Cad batteries is also available through a toll-free number: 1-800-822-8837.

5. Buy Biobased Products

A number of parks are using certain biobased products with very good results, including biobased hydraulic fluid and bar and chain oil (such as Greenplus), universal fluid and grease for heavy equipment (such as Terresolve), 100% biodiesel fuel in Channel Island's marine research vessel, biodiesel generators (Mt. Rainier National Park), and used cooking oil for fuel (Hawaii Volcanoes National Park).

6. Buy Products With Reduced Packaging

Packaging is a significant solid waste problem. EPA estimates that packaging alone accounted for 23.7 % of the volume and 19.4% of the weight of the material that went to municipal landfills in 1996. We can reduce the amount of trash we generate by buying products with reduced packaging.

- Purchase pads of paper that are not wrapped in plastic shrinkwrap, you will not have to throw away the plastic.
- Consider buying a larger quantity packaged in a single box rather than smaller quantities in multiple boxes. An example is computers in "multipaks" rather than packaged individually.

BIODIESEL GENERATORS AT MORA

In 1999, Mt. Rainier National Park (MORA) set a goal of reducing petroleum fuel consumption by 20% by 2005 and chose biodiesel fuel as the best alternative. MORA also began using biodiesel fuel in most power generators in the park. The generators serve as a backup power system for all areas of the park and Sunrise runs entirely on biodiesel-fueled generators. Because of Sunrise's remote location, a public power supply is not available. All facilities, including the visitor center, seasonal housing, day lodge, water treatment plant, and comfort stations, running from the beginning of June through October, rely on biodiesel fuel. MORA's generators run on B-50, a half petroleum, half soy-based fuel.

7. Look for Information on the Environmental Features of the Products

In general, when buying products, consider the following environmental characteristics:

Minimize or Eliminate –

- Heavy metals (e.g., lead, mercury, cadmium)
- Ozone depleting chlorinated compounds (e.g., CFCs)
- Organic solvents (e.g., chlorinated and aromatic hydrocarbons)
- Reactivity, corrosiveness, flammability, irritation potential
- Carcinogens, mutagens, teratogens
- Acute and chronic toxicity
- Substances that can bioaccumulate
- Volatile organic compounds (VOCs)
- Phosphorous

Favor or Prefer –

- Post-consumer recycled content
- Reduced toxicity
- Reusability/repairability
- Reduction in packaging
- Energy efficiency
- Use of renewable energy sources
- Biobased products
- Biodegradability upon disposal

RESOURCE: EPP DATABASE

Not sure about which of these attributes are applicable to which products and/or services? A good source for environmental information about products is EPA’s EPP database. This searchable database includes environmental standards and guidelines and contract language developed by government programs as well as third parties. Organized like a shopping mall, users can browse the database or search for specific product categories. Check out the website at:
www.epa.gov/oppt/epp/database.htm.

Vendors routinely provide information about their products, but they may not always have information about the environmental aspects of their products. Be persistent. Also, the technical and/or the environmental department (rather than the sales department) may be a better source of the information that you need.

There will be cases where you may need to make trade-offs among product attributes. For example, product X might have high-recycled content while product Y might have lower toxicity. In these instances, NPS staff should use their professional judgment, relying on expertise that EPA and NPS environmental staff can provide. Look to your organization’s environmental concerns and/or local environmental priorities to help you in your decision.

8. Beware of “Green Washing” by Some Vendors

Vendors have recognized the benefits of marketing their products as being “green.” Some vendor claims are better than others, both in terms of their relevancy and truthfulness. Thus, environmental attribute claims should be carefully examined to make sure they are consistent with the Federal Trade Commission’s (FTC) *Guides for the Use of Environmental Marketing Claims*. In general, be skeptical of broad claims that the product is “environmentally safe,” “environmentally friendly,” or “non-toxic,” unless the manufacturer can back up the claim with actual documentation.

FTC GUIDELINES PRINCIPLES

1. Clear and prominent qualifications and disclosures.
2. Distinguish between attributes of product, package, and service.
3. Do not overstate attribute.
4. Basis for comparison must be clear.

www.ftc.gov/bcp/online/pubs/bu-spubs/greenguides.pdf

9.0 OVERCOMING ENVIRONMENTAL PURCHASING CHALLENGES

At times, one or more circumstances may occur that preclude the acquisition of minimum content materials. Consider alternative approaches that may permit compliance with the required content standards. For example:

- The items are not available competitively.
 - Ask why. Does a vendor list for that product need to be updated to include new vendors who can supply the environmental products?
 - Express to your existing vendor your commitment (and NPS requirement) to purchase environmental products. Vendors may be willing to work with you to add new products to their product lines especially if they know that they may lose your business.
 - Investigate availability of similar items that can be purchased competitively.
- The products do not meet the agency's reasonable performance standards, or the product's recycled content does not meet stated goals and objectives.
 - Ask why. Has the product been tested recently for performance? There have been dramatic improvements to many of the environmental products on the market. Not unlike any new products entering the marketplace, environmental products also may need to go through a period of trial and error. Rely on documented performance information and the first-hand experience of others who have had good, as well as bad, results using a particular product.
 - Note that alternative products may be compliant with CPG requirements and still fulfill the requirements of the purchase.
 - Remember that EPA has determined that an item is readily available, competitively priced, and performs well before listing in the CPG. However, like other products, some CPG listed items may have better price and performance than others. Thus, it is important to establish a good network of vendors of environmental products. Rely on experiences of others who have first-hand experience with a product. Also, postings on the EPPNet might yield good leads and price information.

CALL FOR PILOT PROGRAMS IN COOPERATIVE PURCHASING!

Some field units have small quantity needs or are located in areas where it is not feasible to purchase items identified as environmentally preferable. If there are specific products whose cost is high for a small quantity, it may prove beneficial to consolidate the needs of several units and purchase under a cooperative purchasing arrangement. The use of environmentally preferable cleaning products is an example of where consolidated purchasing and providing cleaning products to contractors as Government-Furnished Property can help to achieve program goals. Other ideas include:

- Waste disposal
- Painting
- Landscape maintenance
- Vehicle maintenance
- Building maintenance
- Paper

- The products are not readily available.
 - Ask why. Are you dealing with a single vendor? If so, consider looking for a vendor with a national distribution system. Also, plan early for environmental products to allow for a little extra time that may be needed to research vendor sources and locations.
- The products are not available at a reasonable price.
 - Ask why. Is the quantity too small? If so, explore opportunities to consolidate demand with another park, agency, or a local/state organization through a cooperative purchasing mechanism.
 - Investigate other products that could fulfill the requisitioner's need and which may be more reasonably priced.
 - Make sure you are considering the life cycle, and not just the upfront or initial cost. Be prepared to pay more up front for reduced costs over the lifetime of a product.

10.0 GETTING RECOGNITION FOR YOUR ENVIRONMENTAL PURCHASING EFFORTS: AWARD PROGRAMS

Three existing award programs provide recognition for excellence in environmental purchasing. First, the White House “Closing the Circle Awards Program” is a governmentwide program, presented annually by the White House to the best, most innovative programs implementing the objectives of Executive Order 13101 to give greater visibility to these efforts so that they can be incorporated governmentwide. This award also encompasses recognition of individuals who have demonstrated outstanding leadership in implementing environmental management provisions of Executive Order 13148, Greening the Government through Leadership in Environmental Management.

In terms of purchasing, past awards have focused on purchases of products that are made with recycled content, have less packaging, are energy efficient, do not create hazardous waste, and incorporate other environmentally preferable attributes. Further information can be obtained from: www.ofee.gov.

Second and third (and more specific to the NPS), are the annual Department of the Interior and National Park Service Environmental Achievement Awards. For environmental purchasing, these awards recognize conservation of resources through cooperation, consultation, and communication within bureaus or offices, by individual employees or teams, and by contractors to a bureau or office. Further information can be obtained from sonya_capek@nps.gov.

RECOGNITION FOR GREAT ENVIRONMENTAL STEWARDS

Some examples of awards made under the current DOI Environmental Achievement Awards Program include the following:

- The NPS Denver Service Center led a project team and partnership effort to make the new Visitor Center at Zion National Park as resource efficient as possible, seeking to minimize its impact on the environment while enhancing the visitor’s experience. Energy reducing strategies were developed with assistance from the DOE’s National Renewable Energy Laboratory, which overall have reduced energy consumption by 80% over traditional building use. The visitor center qualifies for a LEED silver rating.
- Yellowstone National Park received an award for its multiple pollution prevention, waste reduction, and recycling initiatives. Yellowstone is replacing 15 miles of wooden boardwalk near "Old Faithful" and throughout the park with recycled plastic lumber. The Park also developed a partnership with the State of Montana to test emissions from snowmobiles when biobased fuels and lubricants are used. The beneficial results encouraged private snowmobile rental companies to switch to biodegradable lube oils.

**ENVIRONMENTAL PURCHASING IN THE NATIONAL P ARK SERVICE:
A HOW- TO GUIDE**

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APPENDIX 11.1 – ENVIRONMENTAL PURCHASING AND GREEN BUILDING SPECIFICATION RESOURCES

Resource	Description	Website address
Alameda County, CA, Source Reduction and Recycling Board	Progressive site for construction waste management, green buildings, contracting seminars , and resource guides such as the <i>New Home Construction Green Building Guide</i> , <i>Home Remodeling Green Building Guide</i> , and <i>Resourceful Purchasing: A Hands-On Buyers Manual</i> .	www.stopwaste.org
City of Austin Green Building Program	Comprehensive site with many resources on sustainable building , including green specifications and guidance for constructing and maintaining high performance buildings, the City of Austin’s <i>Sustainable Building Guidelines</i> Sourcebook, factsheets, product information, case studies, and other resources.	www.ci.austin.tx.us/greenbuilder
Biomass Research and Development Initiative	Provides information about biobased products and bioenergy .	www.bioproducts-bioenergy.gov
Buy Green Homepage	A good resource for number of topics and links related to green purchasing, particularly office products , including guidelines and standards and product listings.	www.buygreen.com
City of Seattle, Washington, Office of Sustainability and Environment	Sustainable Purchasing site includes information on policies, guidelines and programs that support ongoing EPP activities such as its Buy Recycled Program, Environmental Management Program and the Copernicus Project, which promotes analyzing and purchasing goods and services at ‘best total cost.’	www.ci.seattle.wa.us/environment/purchasing.htm
Center for a New American Dream	Center’s Procurement Strategies Program helps state and local governments and other large purchasers incorporate environmental considerations into their purchasing decisions.	www.newdream.org/procure/activities.html
Certified Forest Products Council (CFPC)	Advocates the adoption of independent third-party forest certification. Includes an extensive database of certified forest products with search capabilities.	www.certifiedwood.org
Chlorine Free Products Association (CFPA)	Promotes products free of chlorine chemistry. Lists endorsed chlorine-free products .	www.chlorinefreeproducts.org
Conservatree	Has tips, strategies, and case studies on ways to reduce paper consumption . Also detailed information about: paper types, how to choose paper, "greener" paper listings, reducing packaging waste, paper making, environmental issues, and FAQ.	www.conservatree.com

Resource	Description	Website address
Defense Logistics Agency (DLA) Catalogs	Environmentally Preferred Product Catalog contains: Re-refined oil and closed loop systems, antifreeze, cleaners, IPM products, lubricants, plastic lumber, remanufactured ink and toner cartridges , and more.	www.supply.dla.mil/prodenv.asp or call 1-800-345-6333
Department of Energy's (DOE), Federal Energy Management Program (FEMP)	Reduces Government spending by helping agencies reduce energy and water use, manage utility costs, and promote renewable energy. Includes: <ul style="list-style-type: none"> • List of Energy Service Companies (ESCO's) – private industry companies qualified by the DOE as offering energy saving products. • Energy saving performance contracts • Technical assistance • Utility support • Products, technologies, and success stories • Other resources 	www.eren.doe.gov/femp/
Department of Energy's (DOE) Energy Efficiency and Renewable Energy Network	Contains energy efficient building information featuring success stories and case studies, building energy data, technology road maps, Energy Star, software tools, information for children and teachers, and rules, codes, and standards.	www.eren.doe.gov/buildings
E Design, Florida Design Initiative	Sustainable building information on organizations, associations, and additional web sites that deal with "best practices" in building design, construction, and operation. Includes an interactive database of guidelines for high-performance building design, construction, and operation, and information on the U.S. "Smart Schools" program.	http://edesign.state.fl.us
Ecomall Office Products	Links to sites that sell office products with recycled content, high-quality recycled diskettes, energy-efficient lighting products, paper, and more.	www.ecomall.com
Environmental Building News	Sustainable building subscription-based service with access to <i>GreenSpec Binder</i> and the <i>GreenSpec Directory</i> that provide reliable, up-to-date information on more than 1,500 green building products selected by the editors of Environmental Building News.	www.buildinggreen.com
Environment Canada Green Office	Includes guidelines for green office practices and product lists for office supplies, lighting, furnishings, carpet, paint, walls, plants, and more.	www.ec.gc.ca/office
EPA's Case Study on Paint	<i>Painting the Town Green: Aberdeen Proving Ground's (APG) EPP Paints Pilot</i> provides information on low VOC and hazardous materials-free paints , including a list of paints that meet its standards.	www.epa.gov/oppt/epp/pdfs/paint.pdf
EPA's Cleaning Products Pilot Project	Hosts an attributes ranking tool that helps users select environmentally preferable cleaning products .	www.epa.gov/oppt/epp/cleaners/select

Resource	Description	Website address
EPA's Comprehensive Procurement Guidelines (CPG)	Federal requirements for the purchase of recycled content products . Lists specifications and vendor information for numerous products in the fields of construction, landscaping, office and paper, park and recreation, transportation and vehicles, and more.	www.epa.gov/cpg
EPA's ENERGYSTAR	A voluntary labeling program to identify and promote energy-efficient products , to reduce carbon dioxide emissions. Covers new homes, buildings, residential heating and cooling equipment, major appliances, office equipment, lighting, consumer electronics, and more.	www.energystar.gov/
EPA's Environmental Building Specifications	Environmental Specifications for new buildings, largely focusing on Division 1 – General Requirements construction contract specifications.	www.epa.gov/rtp/new-bldg/environmental/specs.htm
EPA's Environmentally Preferable Purchasing (EPP) Program	Created under EO 13101, EPA's EPP Program provides tools, information and resources to assist Federal agencies to put EPP into practice. Highlights include: <ul style="list-style-type: none"> • General EPP Training Tool – Covers basic EPP principles, along with in-depth applications of EPP. • Database of Environmental Information for Products and Services – A searchable database of product-specific information (<i>e.g., environmental standards, and guidelines, vendors, contract language</i>) on a products like cleaning products, food serviceware, copiers, carpets, paints, and electronics. • Promising Practices Guide - A series of short case studies highlighting successful strategies for incorporating environmental factors into a variety of product and service contracts. 	www.epa.gov/oppt/epp www.epa.gov/oppt/epp/gentt/index.html www.epa.gov/oppt/epp/database www.epa.gov/oppt/epp/ppg
EPA's Janitorial Products Pollution Prevention Project	Helpful tools include information on the risks associated with more than 100 cleaning product ingredients, a list of high risk products, and risk evaluation forms. It contains a series of fact sheets highlighting the pollution prevention opportunities associated with cleaning products, including recommendations about which chemicals to avoid.	www.epa.gov/opptintr/epp/cleaners/select
General Services Administration (GSA)	Environmental Products and Services Guide and GSA Recycled Product Information.	http://pub.fss.gsa.gov/environ/ or call (817) 334-5215
Green Building Resource Center	Focuses on green building topics including pre-design, site design, building design, construction, and operations. It also contains resources such as case studies, publications, courses, organizations, tools, and additional Internet resources.	http://greendesign.net/gbr/

Resource	Description	Website address
Green Earth Office Supply	Catalog of green office products including recycled-content products, less toxic products, and cruelty-free products.	www.webcom.com/geos
Green Seal	Independent, nonprofit organization promoting the manufacture and sale of environmental products . Publishes <i>Choose Green</i> reports, establishes EPP standards and certifies products such as household cleaning products, carpet, paper, and more.	www.greenseal.org
International Organization for Standardization (ISO)	Non-Governmental worldwide federation of national standards bodies from approximately 130 countries. ISO sets technical performance and compatibility standards for manufactured products. ISO 14000 is a group of environmental standards covering environmental management systems, environmental auditing, evaluation of environmental performance, environmental labeling, and life-cycle assessment.	www.iso.ch/iso/en/ISOOnline.frontpage
Integrated Pest Management (IPM) Almanac	Provides extensive IPM tools and information, including tip sheets, checklists, and IPM products.	www.ipmalmanac.com
Javits-Wagner-O'Day (JWOD) Catalog	Mandatory source of supply for Federal purchasing. Offers environmental products particularly office equipment and supplies and janitorial products.	www.jwod.gov or www.jwod.com or call (703) 603-7740 email info@jwod.gov
King County Environmental Purchasing Program	Provides information about the county's efforts to purchase environmental products and services . Includes sample contract language, product reviews, and copies of the county's Environmental Purchasing Bulletins.	www.metrokc.gov/procure/green/
King County's Green Building Program	Includes Job Specifications for construction solid waste management, Built Green program, green building codes, and more.	http://dnr.metrokc.gov/swd/bizprog/sus_build/specs.htm
King County Map of Recycled Content Buildings	Contains information on sustainable building , recycled-content construction materials and products, specifications, and project details in the Pacific Northwest.	http://dnr.metrokc.gov/market/encompass/index.htm
Massachusetts EPP Program	Extensive web site documenting efforts to identify and purchase environmentally preferable products . Includes contracting language, regulations, reports, and purchasing handbooks, as well as Sustainable Design & Green Building information (product information, some green specs, etc.), janitorial products, office products, facility maintenance products, vehicle products, and more.	www.state.ma.us/osd/enviro/products.htm
Minnesota's Environmental Purchasing	Contains a unique searchable directory of recycled-content products made in Minnesota, as well as a list of model EPP programs in various local governments and states.	www.moea.state.mn.us/lc/purchasing/index.cfm

Resource	Description	Website address
National Association of Counties (NACo)	The “Local Government Environmental Purchasing Starter Kit. ”	www.naco.org/
National Institute of Standards and Technology (NIST)	Created the Building for Environmental and Economic Sustainability (BEES) tool, which helps purchasers balance the environmental and economic performance of building products through life-cycle assessment.	www.bfrel.nist.gov/oe/bees.html
National Pesticide Information Center	Contains a multitude of IPM brochures, manufacturers lists, fact sheets, reports, and technical and regulatory information.	http://npic.orst.edu/
Office of the Federal Environmental Executive (OFEE), White House Task Force on Recycling	Coordinates and assists Federal agencies’ environmental efforts in waste prevention, recycling, affirmative procurement of guideline items, and the acquisition of environmentally preferable products and services. Provides a variety of information resources and tools, including <i>Greening the Government: A Guide to Implementing Executive Order 13101</i> . Also includes a state-by-state list of bulk and commercial sources of re-refined oil.	www.ofee.gov
Oikos Green Building Source	REDI (Resources for Environmental Design Index), a searchable database with up-to-date information on environmentally friendly building products and companies. Also includes updated news links, a library, and a product gallery.	www.oikos.com
Pennsylvania’s Online Recycled Products Guide	Compiles lists of companies who sell recycled products , including re-refined hydraulic and gear oil.	www.dep.state.pa.us/wm_apps/recycledproducts
ReThink Paper (RTP)	Advocates using paper efficiently and replacing virgin wood with environmentally benign non-wood fibers, such as hemp, kenaf and agricultural residues. Provides information on day-to-day paper reduction techniques, "paperless office" communication, paper selector and many other useful ecological paper resources.	www.rethinkpaper.org
Safety-Kleen Oil Recovery	Has a closed-loop system for recycling used oil and selling re-refined oil. Also has a recycling service for antifreeze.	www.safety-kleen.com
Santa Monica Environmental Purchasing Program	The City of Santa Monica has an active environmental purchasing program. Details including environmental language of its custodial contract is included.	www.ci.santa-monica.ca.us/environment/policy/purchasing
Scientific Certification Systems	Through its Environmental Claims Certification Program, SCS independently verifies the accuracy of claims for environmental products and services. Includes life-cycle impact assessment and certified forests and companies.	www.scs1.com/

Resource	Description	Website address
Sierra Antifreeze	Sells a non-toxic coolant made with propylene glycol that is safer for the environment. Site includes product information, frequently asked questions about antifreeze, distributor information, and technical sheets.	www.sierraantifreeze.com
Sustainable Sources	Contains green building databases of sustainable products, materials, and design assistance; publications on topics including alternative construction techniques, sustainable, non-toxic, natural building, guides and plan books, architecture/design, and general environmental health; a green building professionals directory; and more.	www.greenbuilder.com
UNICOR	A mandatory source of products and services provided by the Federal Prison Industries.	www.unicor.gov
United Soybean Board	Has extensive information on soy-based products including: lubricants, wood adhesives, paints, inks, pesticide carriers and adjuvants, plastics, solvents, building composites, and more. Also contains a products guide, technical information on soy, and reports on marketing and development issues.	www.unitedsoybean.org
USDA Biobased Products Initiative	Includes vendor information for biobased products including lubricants, adhesives, alternative fuels, construction materials, inks, landscaping materials, paints, solvents, cleaners, tree-free paper and packaging, and more. Additional information will be added once the biobased listing process is completed.	www.usda-biobasedproducts.net
US Green Building Council	Contains information on the council, its LEED rating system, and many other green building resources. Includes ordering information for the <i>Sustainable Building Technical Manual</i> , which identifies environmental issues that should be considered throughout the entire life of a building.	www.usgbc.org
Whole Building Design Guide	Provides green building information, guidance and recommendations for the building professional to improve the quality and performance of buildings. The information can be viewed by the type of building or use; specific design goals (including sustainability); and products and systems (CSI MasterFormat or UniFormat). Has multiple links to design tools, federal mandates and government and non-governmental standards.	http://wbdg.org/index.asp

APPENDIX 11.2 DEFINITIONS AND ACRONYMS

Term	Definition or Description	Reference
Acquisition Planning	An overall acquisition management strategy; including coordination and integration of acquisitions through a comprehensive plan for fulfilling the agency need in a timely manner at a reasonable cost.	FAR Part 2 – Definitions
Affirmative Procurement Program	RCRA Section 6002 requires each procuring agency to establish an affirmative procurement program for maximizing its purchases of EPA-designated items.	RCRA Section 6002 FAR 23.404 Agency Affirmative Procurement Programs
Authorized Individual	A person who has been granted authority, in accordance with agency procedures, to acquire supplies and services.	FAR Part 2 – Definitions
Best Value	The expected outcome of an acquisition that, in the government's estimation, provides the greatest overall benefit in response to the requirement.	FAR Part 2 – Definitions
Biobased Product	A commercial or industrial product (other than food or feed) that utilizes biological products or renewable domestic agricultural (plant, animal, and marine) or forestry materials.	FAR 23.701 – Contracting for Environmentally Preferable Products and Services
Comprehensive Procurement Guideline (CPG)	EPA-designated items that must contain recycled content when purchased by Federal agencies or by other procuring agencies and Government contractors using appropriated Federal funds.	www.epa.gov/cpg
Consumer Product	Any article (other than an automobile) that- (a) Consumes energy; and (b) Is distributed in commerce for personal use or consumption by individuals.	FAR 23.2 – Energy Conservation
Covered Product	Means a consumer product of one of the following types: (a) central air conditioners. (b) clothes dryers. (c) clothes washers. (d) dishwashers. (e) freezers. (f) furnaces. (g) home heating equipment, not including furnaces. (h) humidifiers and dehumidifiers. (i) kitchen ranges and ovens. (j) refrigerators and refrigerator-freezers. (k) room air conditioners.	Far 23.2 – Energy Conservation

Term	Definition or Description	Reference
	(l) television sets. (m) water heaters. (n) any other type of product that the secretary of energy classifies as a covered product under 42 USC 6292(b).	
Designated Item or Product	A product or category of products designated by EPA in the Comprehensive Procurement Guideline. Products that are or can be made from recovered materials that have been designated in the CPG through EPA's formal rulemaking process. Also referred to as "designated items."	www.epa.gov/cpg
Energy Efficiency Standard	A performance standard that – (a) prescribes a minimum level of energy efficiency for a covered product, determined by test procedures prescribed under 42 U.S.C. 6293; and (b) includes any other requirements that the secretary of energy may prescribe under 42 U.S.C. 6295(c).	Subpart 23.2 – Energy Conservation
Energy Use And Efficiency Label	A label provided by a manufacturer of a covered product under 42 U.S.C. 6296.	Subpart 23.2 – Energy Conservation
Energy Efficient Product	A product in the upper 25 percent of efficiency for all similar products or, if there are applicable Federal appliance or equipment efficiency standards, a product that is at least 10 percent more efficient than the minimum Federal standard.	FAR Part 2 – Definitions
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.	FAR Part 2 – Definitions
Executive Order 13101	Entitled <i>Greening the Government Through Waste Prevention, Recycling, and Federal Acquisition</i> , Executive Order (E.O.) 13101 was signed on September 14, 1998. This Order replaces E.O. 12873 and reinforces the Federal government's buy-recycled efforts.	FAR Part 5 – Publicizing Contract Actions

Term	Definition or Description	Reference
Feb Biz Opps	This internet site at (Fed Biz Ops) will replace the Commerce Business Daily as of January 2002 and will become the primary source of advertising for projects in excess of \$25,000.	FAR Part 5 – Publicizing Contract Actions
Governmentwide Charge Card	A charge card, similar in nature to a commercial credit card, issued to authorized agency personnel to use to acquire and to pay for supplies and services.	FAR Parts 2 – Definitions and 13 – Simplified Acquisition Procedures
Imprest Fund	A cash fund of a fixed amount established by an advance of funds, without charge to an appropriation, from an agency finance or disbursing officer to a duly appointed cashier, for disbursement as needed from time to time in making payment in cash for relatively small amounts.	FAR Part 13 – Simplified Acquisition Procedures
Life Cycle Assessment	The comprehensive examination of a product's environmental and economic effects throughout its lifetime including new material extraction, transportation, manufacturing, use, and disposal.	Executive Order 13101
Life Cycle Cost	The total cost to the government of acquiring, operating, supporting, and (if applicable) disposing of the items being acquired.	FAR Part 2 – Definitions
Life Cycle Cost	The amortized annual cost of a product, including costs associated with capital, installation, operations, maintenance, and disposal, discounted over the lifetime of the product.	Executive Order 13101
Manufacture	To manufacture, produce, assemble, or import.	Subpart 23.2 – Energy Conservation
Manufacturer	As used in this part, this term means any business that, or person who, manufactures a consumer product.	Subpart 23.2 – Energy Conservation
Market Research	Collecting and analyzing information about capabilities within the market to satisfy Agency needs.	FAR Part 2 – Definitions
Micro-Purchase	Acquisition of supplies or services (except construction), the aggregate amount of which does not exceed \$2,500, except that in the case of construction, the limit is \$2,000.	FAR Part 2 – Definitions
Minimum Content Standard	The minimum recovered material content of a product. The standard must be high enough to assure the recovered material content required is the maximum available without jeopardizing the intended item use of the product.	RCRA, Section 6002

Term	Definition or Description	Reference
Offer	A response to a solicitation that, if accepted, would bind the offeror to perform the resultant contract.	FAR Part 2 – Definitions
Ozone-Depleting Substance	Means any substance the Environmental Protection Agency designates in 40 CFR part 82.	FAR Part 2 – Definitions
Performance-Based Contracting	Structuring all aspects of an acquisition around the purpose of the work to be performed with the contract requirements set forth in clear, specific and objective terms with measurable outcomes.	FAR Part 2 – Definitions
Planner	The designated person or office responsible for developing and maintaining a written plan, or for the planning function in those acquisitions not requiring a written plan.	FAR Part 2 – Definitions
Pollution Prevention	Means any practice that – (1) (i) reduces the amount of any hazardous substance, pollutant, or contaminant entering any waste stream or otherwise released into the environment (including fugitive emissions) prior to recycling, treatment, or disposal; and (ii) reduces the hazards to public health and the environment associated with the release of such substances, pollutants, and contaminants; (2) reduces or eliminates the creation of pollutants through increased efficiency in the use of raw materials, energy, water, or other resources; or (3) protects natural resources by conservation.	FAR Part 2 – Definitions

Term	Definition or Description	Reference
Post-consumer Material	<p>A material or finished product that has served its intended use and has been discarded for disposal or recovery, having completed its life as a consumer item. Postconsumer material is a part of the broader category of "recovered material." For paper and paper products, postconsumer material means "postconsumer fiber" defined by the U.S. Environmental Protection Agency as -</p> <ul style="list-style-type: none"> (1) paper, paperboard, and fibrous materials from retail stores, office buildings, homes, and so forth, after they have passed through their end-usage as a consumer item, including: used corrugated boxes; old newspapers; old magazines; mixed waste paper; tabulating cards; and used cordage; or (2) all paper, paperboard, and fibrous materials that enter and are collected from municipal solid waste; but not (3) fiber derived from printers' over-runs, converters' scrap, and over-issue publications. 	FAR Part 11 – Describing Agency Needs
Pre-Consumer Materials	Materials generated in manufacturing and converting processes, such as manufacturing scrap and trimmings/cuttings.	FAR Part 11 – Describing Agency Needs
Procurement Preference Program	The first element of an Agency Affirmative Procurement Program, in which an Agency expresses a preference for purchasing recycled content products designated by EPA. The other elements include: promotion; certification and verification; and reporting.	RCRA, Section 6002
Procuring Activity	A component of an executive agency having a significant acquisition function and designated as such by the head of the agency. Unless agency regulations specify otherwise, the term "procuring activity" is synonymous with "contracting activity."	FAR Part 2 – Definitions
Procuring Agency	Any Federal agency, or any state agency or agency of a political subdivision of a state, which is using appropriated Federal funds for procurement.	FAR Part 2 – Definitions
Qualified Products List (QPL)	A list of products that have been examined, tested, and have satisfied all applicable qualification requirements.	FAR Part 2 – Definitions

Term	Definition or Description	Reference
RCRA Section 6002	Section 6002 of the Resource Conservation and Recovery Act (RCRA) of 1976, as amended, directs EPA to designate items that are or can be produced with recovered materials and to recommend practices for buying these items. Among other things, RCRA Section 6002 also provides criteria for EPA to consider when selecting items for designation, and requires procuring agencies to establish Affirmative Procurement Programs for designated items.	RCRA Section 6002
Reconditioned	Restored to the original normal operating condition by readjustments and material replacement.	FAR Part 11 – Describing Agency Needs
Recovered Materials (paper and paper products)	For paper and paper products, is defined by EPA in its Comprehensive Procurement Guideline as “recovered fiber” and means the following materials: (1) Postconsumer fiber. (2) Manufacturing wastes such as- (i) Dry paper and paperboard waste generated after completion of the papermaking process; and (ii) Repulped finished paper and paperboard from obsolete inventories of paper and paperboard manufacturers, merchants, wholesalers, dealers, printers, converters, or others.	FAR Part 11 – Describing Agency Needs
Recovered Materials (other than paper and paper products)	Waste materials and byproducts which have been recovered or diverted from solid waste, but does not include materials and byproducts generated from, and commonly reused within, an original manufacturing process.	FAR Part 2 – Definitions EPA CPG Glossary www.epa.gov/cpg/glossary.htm#recovered
Recyclability	The ability of a product or material to be recovered or otherwise diverted from the solid waste stream for the purpose of recycling.	Executive Order 13101
Recycled Material	A material utilized in place of raw or virgin material in product manufacturing (see “Recovered Materials”).	www.ofee.gov
Recycling	The series of activities, including collection, separation, and processing, by which products or other materials are recovered from the solid waste stream for use as raw materials in the manufacture of new products (other than fuel for producing heat or power by combustion).	Executive Order 13101

Term	Definition or Description	Reference
Remanufactured	Factory rebuilt to original specifications.	FAR Part 11 – Describing Agency Needs
Residual Value	The proceeds, less removal and disposal costs, if any, realized upon disposition of a tangible capital asset. It usually is measured by the net proceeds from the sale or other disposition of the asset, or its fair value if the asset is traded in on another asset.	FAR Part 2 – Definitions
RMAN	Recovered Materials Advisory Notices (RMANs) provide purchasing guidance and recommend recovered and post-consumer material content levels for designated items. RMAN recommendations are guidance and therefore are not codified in the Code of Federal Regulations.	www.epa.gov/cpg
Simplified Acquisition Threshold (SAT)	\$100,000, except that in the case of any contract to be awarded and performed, or purchase to be made, outside the United States in support of a contingency operation (as defined in 10 U.S.C. 101(a)(13)) or a humanitarian or peacekeeping operation (as defined in 10 U.S.C. 2302(8) and 41 U.S.C. 259(d)), the term means \$200,000.	FAR Parts 2 – Definitions and 13 – Simplified Acquisition Procedures
Solid Waste	Waste materials generated from durable goods, non-durable goods, containers and packaging, food wastes, yard waste and miscellaneous organic waste from residential areas, commercial and institutional operations and public areas in the park (otherwise known as municipal solid waste). While this definition does not include hazardous waste, household hazardous wastes are often discarded along with other wastes and thus may be expected in small quantities in any load of mixed waste.	RCRA, Section 1004 NPS Solid Waste Management Handbook
Value Engineering	An analysis of the functions of a program, project, system, product, item of equipment, building, facility, service, or supply of an executive Agency, performed by qualified Agency or contractor personnel, directed at improving performance, reliability, quality, safety, and life-cycle costs (Section 36 of the Office of Federal Procurement Policy Act, 41 U.S.C. 401, <i>et seq.</i>). For use in the clause at 52.248-2, see the definition at 52.248-2(b).	FAR Parts 2 – Definitions and 48 – Value Engineering

Term	Definition or Description	Reference
Waste Prevention	Any change in the design, manufacturing, purchase, or use of materials or products (including packaging) to reduce their toxicity before they become municipal solid waste. Waste prevention also refers to the reuse of products or materials (also known as "source reduction").	Executive Order 13101
Waste Reduction	Preventing or decreasing the amount of waste being generated through waste prevention, recycling, or purchasing recycled and environmentally preferable products.	FAR Part 2 – Definitions Executive Order 13101



United States Department of the Interior

OFFICE OF THE SECRETARY
Washington, D.C. 20240

December 2, 1996

Department of the Interior Acquisition Policy Release (DIAPR) 97-2

SUBJECT: ENVIRONMENTAL CONTRACTING INITIATIVES

1. Purpose: The purpose of this DIAPR is to implement policy pertaining to Federal acquisition requirements that comply with statutory and Executive Orders involving environmental initiatives.

2. Effective Date:

3. Expiration Date: This guidance will remain in effect until canceled or superseded.

4. Background: Over the last two decades, a number of statutes and Executive Orders have established environmental compliance requirements on the acquisition process. Consistent with such laws and executive orders, the Department of the Interior is committed to implementing requirements that result in responsible agency wide practices that conserve energy, water, and other natural resources. These statutes and Executive Orders require developing affirmative programs, and incorporating additional solicitation provisions and contract clauses to satisfy compliance requirements. The statutes and Executive Orders address:

- a. Environmentally preferable and energy-efficient products and services (Appendix A);
- b. Energy conservation (Appendix B);
- c. Pollution prevention (Appendix C); and
- d. Ozone-depleting substances (Appendix D).

A glossary and listings of statutes and Executive Orders are found in appendices E & F, respectively.

5. Actions Required: Refer to individual environmental subject area appendices for specific guidance on implementing of the statutory and Executive Order requirements.

All questions or requests for reference materials identified in this document should be addressed to Jennings Wong, Procurement Analyst, Office of Acquisition and Property Management, on (202) 208-6704.

A handwritten signature in black ink, appearing to read "Paul A. Denett". The signature is written in a cursive style with some capitalization.

Paul A. Denett, Director
Office of Acquisition and Property
Management

Attachments: Appendices

cc: Willie Taylor, Director, Office of Environmental Policy and Compliance

Appendix A

Environmentally Preferable and Energy Efficient Products and Services

Background:

Under Section 6002 of the Resource Conservation and Recovery Act (RCRA), Congress provided a mechanism to increase Government purchase of recycled products. These purchases, in turn, help to stimulate markets for recovered materials.

On October 20, 1993, President Clinton issued Executive Order 12873 "Federal Acquisition, Recycling, and Waste Prevention," applicable to all Executive Branch agencies. It reaffirms and strengthens the affirmative procurement requirements contained in RCRA and assigns specific additional regulatory responsibilities to EP A.

Policy Letter 92-4, "Procurement of Environmentally-Sound and Energy-Efficient Products and Services," issued November 19, 1992, by the Office of Federal Procurement Policy establishes policies implementing RCRA within the executive branch.

RCRA Section 6002 requires EPA to designate products that can be made with recovered materials and to recommend practices for procuring them. Once EP A designates a procurement item or product category, procuring agencies are required to buy the item with the highest recovered materials content level practicable.

Prior to 1995, EPA issued five procurement guidelines for paper and paper products, re-refined lubricating oil, retread tires, building insulation, and cement and concrete made with fly ash. These "designated items" have been the focus of EPA buy recycled efforts over the past several years. On May 1, 1995, EPA published the Comprehensive Procurement Guideline (CPG), announcing 19 more items that are or can be made with recovered materials. (See attached table titled EPA Designated Items).

In addition, EPA issued the Recovered Material Advisory Notice (RMAN) as a user guide on purchasing designated items made with recovered materials. The RMAN further promotes the Federal agency recycling program and encourages greater use of the acquisition process to develop and stimulate private industry interest in markets for recovered materials.

Policy:

As the lead Federal agency responsible for managing most of the Nation's public lands and natural resources, it is the DOI's policy to use sound business practices to maximize the purchase of items made with recovered materials. To comply with the requirements in RCRA and E.O. 12783, the Department must have an Affirmative Procurement Program. Its objectives are:

- Implement cost-effective contracting preference programs favoring the acquisition of environmentally preferable and energy-efficient products and services.
- Ensure that procurement specifications do not *exclude* the use of recovered materials and do not require items to be manufactured from virgin materials.
- 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 non-hazardous and recovered materials.
- Promote the use of cost-effective waste reduction when creating plans, drawings, specifications, standards, and other product descriptions. Methods may include authorizing material substitutions, extension of shelf-life, and process improvement.

Requirements:

1. All Interior bureaus and offices are required to establish Affirmative Procurement Programs (CAPP) for all items designated by EPA or DOI. The APP must be revised to reflect newly designated items within one year from the date they are designated. The APP should require that 100 percent of bureau/office purchases of products meet or exceed the EPA or DOI guideline standards unless documented to explain why that level is not acceptable.
2. Contracting officials shall give preference to practices and products that conserve natural resources and protect the environment pursuant to RCRA.
3. Contracting officers shall assist program managers in promoting the purchase of products made from recovered materials through dissemination of product information.
4. Contracting officers shall include the following solicitation provisions and contract clauses as prescribed in FAR 23.405:

FAR 52.223-4;	"Recovered Materials Certification".
FAR 52.223-8	“Estimate of Percentage of Recovered Material for Designated Items to be Used in the Performance of the Contract”.

FAR 52.223-9 "Certification of Percentage of Recovered Material Content for EPA Designated Items Used in Performance of the Contract".

FAR 52.223-10 "Waste Reduction Program".

5. Contracts that provide for contractor operation of a government-owned or leased facilities shall include the applicable provisions and clauses in paragraph 4 above.
6. For FY 1995, OFPP exempted the Department of the Interior from the annual report requirement under RCRA. In spite of this exemption, all bureaus and offices should continue responsible practices to acquire items made with recovered materials that will help conserve energy, water, and other material resources.

Energy Efficient Products and Services

Background:

As the lead Federal agency responsible for managing most of our Nation's public lands and natural resources, the Department has a special obligation to be a leader in energy management and conservation. The Department consumes significant amounts of energy in its operation of facilities, vehicles, and other equipment. Under Executive Order 12902, "Energy Efficiency and Water Conservation of Federal Facilities", Interior is required to develop and implement a management program that will reduce energy consumption used in its buildings by 30 percent by the year 2005. Each bureau/office program should facilitate introduction of cost-effective, energy-efficient technologies into Interior facilities to achieve Department-wide energy conservation goals. In addition, greater use of Energy Saving Performance Contracts (ESPC), solar, and other renewable energy sources will contribute to achieving established conservation and reduction goals.

Policy:

It is the Department's policy to consider energy conservation and efficiency factors in the procurement of products and services. Energy conservation and efficiency data will be considered along with estimated cost and other relevant factors in the preparation of specifications, purchase requests, and solicitations for offers. Preference shall be given to practices and products that conserve energy and protect the environment. Agency preference and demand for environmentally sound and energy efficient products and services will greatly expand the market for such products/services.

Requirements:

To achieve energy conservation goals and comply with requirements in E.O. 12902, contracting officers should work closely with bureaus and offices to:

1. Reduce energy costs, eliminate waste, and conserve energy resources through the use of energy-efficient products and cost-effective technologies.
2. Incorporate energy efficiency into the decision making-process during the design/specification phase when considering the purchase or lease of facilities, vehicles, and other equipment for Government use.
3. Increase efficiency through capital investment and improved operations under energy savings performance contracts (ESPC) or other forms of partnering agreements. (For more details on ESPCs, refer to 10 CFR 436 Federal Register of April 10, 1995).

4. Give preference to the purchase of products listed as energy efficient in guidelines issued by OMB, and product information available from the Defense Logistics Agency, Department of Energy, Environmental Protection Agency, and General Services Administration (e.g., EP A Energy Star Program, FEMP Product Recommendations, DLA Energy Efficient Lighting Catalog, GSA Environmental Products Guide, and GSA Supply Catalog). Under E.O. 12845, "Requiring Agencies to Purchase Energy Efficient Computer Equipment", and Federal Acquisition Regulation, agencies must ensure that all contract actions or awards for microcomputers, monitors, and printers issued after October 18, 1993, contain specifications that meet "EP A Energy Star" requirements for energy efficiency. The Office of Information Resources Management is responsible for reporting annually to the GSA on products exempted from E.O. ' 12845 requirements.
5. Promote the use of alternative fuels, solar and other renewable energy sources.
6. Accelerate retirement or replacement of inefficient equipment.

COMMUNITY RIGHT -TO-KNOW AND POLLUTION PREVENTION

Background

The Federal Government should be a good neighbor to local communities by becoming a leader in providing information to the public concerning toxic and hazardous chemicals/substances at its facilities. The Emergency, Planning and Community Right-to-Know Act of 1986 (EPCRA) and the Pollution Prevention Act of 1990 (PP A) established programs to protect public health and the environment by providing the public with important information on toxic chemicals being released by manufacturing facilities into the air, land, and water in its communities. Under EPCRA and PP A, manufacturers are required to submit annual reports on toxic chemical releases and waste management activities to the Environmental Protection Agency (EPA) and the States. Most of the information collected by EP A and the States, pursuant to these laws, is available to the general public upon request.

On August 3, 1993, Executive Order 12856, "Federal Compliance with Right-to-Know Laws and Pollution Prevention Requirements," was signed by President Clinton. The order further promotes the Federal Government's role to become a leader in the field of pollution prevention through the management of its facilities, its acquisition practices, and supporting the development of innovative pollution prevention programs and technologies. Under E.O. 12856, Federal agencies are required to develop and implement comprehensive pollution prevention strategies designed to include source reduction into facilities management and acquisition. In addition, the order required Federal facilities to comply with reporting provisions of EPCRA and PPA, including Toxic Release Inventory reporting and emergency planning requirements. The responsibility for EPCRA and PP A reporting and facilities management vests with individual Departmental bureaus and offices who are responsible for collecting and submitting required reports to EPA and the states. For additional details relating to pollution prevention and community right-to-know requirements, refer to the Department of the Interior's "General Guidance on Pollution Prevention and Right-to-Know, Recycling and Green Acquisition" published in September 1995 by the Office of Environmental Policy and Compliance.

In August 1995, the President signed Executive Order 12969, "Federal Acquisition and Community Right-to-Know." The order mandates Federal agencies to include in contract solicitations an eligibility criterion for competitive acquisitions that are expected to exceed \$100,000. It requires Federal contractors to ensure that Toxic Release Inventory Forms (Form Rs) are filed by covered facilities for the life of the contract.

In addition, offerors must include in their response to the solicitation a certification that the offeror will (if awarded a contract) ensure that its facilities file Form Rs unless otherwise exempt by the order .

Policy

It is the Interior's policy to promote the purchase of supplies and services that have been produced with a minimum adverse impact on community health and the environment. To the maximum extent practicable, Interior contracting activities are to comply with the above laws and orders governing the acquisition of toxic chemical products and related services.

Requirements

To implement the procurement policy of E.O. 12969 requirements, contracting officers shall ensure compliance with solicitation provision and contract clause requirements prescribed in FAR 23.907. FAR provision 52.223-13, "Certification of Toxic Chemical Release Reporting," shall be included in all applicable competitive solicitations, unless exempted under FAR 23.906. An award shall not be made to an offeror who does not submit the solicitation certification (FAR 52.223-13) as prescribed above. A resultant contract award shall contain FAR clause 52.223-14, "Toxic Chemical Release Reporting."

OZONE-DEPLETING SUBSTANCES

Background

Executive Order 12843, "Procurement Requirements and Policies for Federal Agencies for Ozone-Depleting Substances," (April 21, 1993) directs Federal agencies to change their procurement practices to reduce the production and consumption of substances that cause the depletion of stratospheric ozone. The Environmental Protection Agency (EPA) has published regulations (40 CFR Part 82) eliminating the use and manufacturing of designated classes of ozone-depleting substances. A number of these substances are scheduled for phaseout and replacement with EPA-approved alternatives.

Policy

The Department's policy is to implement cost-effective programs to maximize use of alternatives to ozone-depleting substances. Requesting offices are to modify specifications and contracts that require the use of ozone-depleting substances to the extent practicable.

Requirements

The contracting officer shall insert the clause FAR 52.223-11, "Ozone-Depleting Substances" in solicitations and contracts for supplies containing or manufactured with ozone-depleting substances. Clause FAR 52.223-12, "Refrigeration Equipment and Air Conditioners," shall be inserted in requirements for services involving maintenance, repair, disposal of any equipment or appliance using ozone-depleting substances as a refrigerant. Equipment and appliances include air conditioners (including those in motor vehicles), refrigerators, chillers, and freezers. Refer to 40 CFR Part 82 for more details on ozone-depleting substances.

11/02/92

**EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF MANAGEMENT AND BUDGET
WASHINGTON, D.C. 20503**

**Office of Federal Procurement Policy
November 2, 1992**

Policy Letter 92-4

**TO THE HEADS OF EXECUTIVE DEPARTMENTS AND
ESTABLISHMENTS**

**SUBJECT: Procurement of Environmentally-Sound and Energy-Efficient
Products and Services.**

1. **Purpose.** This Policy Letter provides Executive branch policies for the acquisition and use of environmentally-sound, energy-efficient products and services.
2. **Supersession Information.** The Policy Letter supersedes and cancels OFPP Policy Letter 76-1, **Federal Procurement Policy Concerning Energy Conservation**, dated August 6, 1976; Supplement No. 1 to Policy Letter 76-1, dated July 2, 1980, and OFPP Policy Letter 77-1, **Procurement of Products that Contain Recycled Material**, dated February 2, 1977.
3. **Authority.** The Policy Letter is issued pursuant to section 6(a) of the Office of Federal Procurement Policy (OFPP) Act, as amended, 41 U.S.C. 405, and section 6002 of the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. 6962. RCRA, section 6002 requires OFPP to issue coordinated policies to maximize Federal use of recovered material.
4. Definitions.
 - a. **Executive Agency.** Means an Executive department, and an independent establishment within the meaning of 5 U.S.C. 101, 102, 103(l) and 104(l), respectively.

- b. **Recovered Material.** Means waste material and by-products which have been recovered or diverted from solid waste, but such term does not include those materials and by-products generated from, and commonly reused within, an original manufacturing process (42 U.S.C. 6903(19)).
- c. **Post-Consumer Waste.** Means a material or product that has served its intended use and has been discarded for disposal after passing through the hands of a final user. Post-consumer waste is a part of the broader category "recycled material" (40 CFR 247.101(e)).
- d. **Recycled Materials.** Means a material that can be utilized in place of a raw or virgin material in manufacturing a product and consists of materials derived from post-consumer waste, industrial scrap, material derived from agricultural waste and other items, all of which can be used in the manufacture of new products (40 CFR 247.101(g)).
- e. **Environmentally-Sound.** Means a product or service that minimizes damage to the environment and is less harmful to the environment to use, maintain and dispose of in comparison to a competing product or service.
- f. **Cost-Effective Procurement Preference Program.** Means a program that favors, where price and other factors are equal, the procurement of products and services that are more environmentally-sound or energy-efficient than other competing products and services.
- g. **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.
5. **Background.** In its day-to-day operations, the Federal Government has the opportunity and obligation to be environmentally and energy conscious in its selection and use of needed products and services. The Government, as the largest single consumer in the nation, has many opportunities to conserve and make more efficient use of energy and other resources. Leveraging the Government's \$190 billion annual purchasing program toward more energy-efficient and environmentally-sound practices will not only benefit the nation by reducing the cost of Government, but will help make the Government a model consumer.
6. **Policy.** It is the policy of the Federal Government that Executive agencies implement cost-effective procurement preference programs favoring the purchase of environmentally-sound, energy-efficient products and services.
- a. **Energy Efficiency.** Executive agencies shall consider energy conservation and efficiency factors in the procurement of property and services, pursuant to the Energy Policy and Conservation Act, 42 U.S.C. 6201, **et seq.**; section 3 of Executive Order 11912, as amended, April 13, 1976, and section 5 of Executive Order 12759, April 17, 1991. Energy conservation and efficiency data will be considered, along with estimated cost and other relevant factors, in the development of purchase requests, invitation for bids and solicitations for offers.

In addition, with respect to the procurement of consumer products, as defined under Part B, Title III of the Energy Policy and Conservation Act, agencies shall consider energy use/efficiency labels (42 U.S.C. 6294) and prescribed energy efficiency standards (42 U.S.C. 6295) in making purchasing decisions.

b. Environmental Conservation. Executive agencies shall give preference in their procurement programs to practices and products that conserve natural resources and protect the environment, pursuant to the Resource Conservation and Recovery Act as amended, 42 U.S.C. 6962 and Executive Order 12780, October 31, 1991. Environmental factors will be considered, along with estimated costs and other relevant factors, in the development of purchase requests, invitations for bids, and solicitations for offers.

7. Responsibilities.

a. Heads of Executive Agencies. In implementing the policies in Paragraph 6, above, Executive agencies shall:

- (1) Identify and procure needed products and services that, all factors considered, are environmentally-sound and energy-efficient;
- (2) Procure products, including packaging, that contain the highest percentage of recovered materials, and where applicable, post-consumer waste, consistent with performance requirements, availability, price reasonableness and cost effectiveness;
- (3) Employ life cycle cost analysis, whenever feasible and appropriate, to assist in making product and service selections;
- (4) Use product descriptions and specifications that reflect cost-effective use of recycled products, recovered materials, water efficiency devices, remanufactured products and energy-efficient products, materials and practices;
- (5) Work with private standard setting organizations and participate, pursuant to OMB Circular No. A-119, in the development of voluntary standards and specifications defining environmentally-sound energy-efficient products, practices and services;
- (6) Require vendors to certify the percentage of recovered materials used, when contracts are awarded wholly or in part on the basis of utilization of recovered materials;
- (7) Assure, when drafting or reviewing specifications for required items, that the specifications (a) do not exclude the use of recovered materials; (b) do not unnecessarily require the item to be manufactured from virgin materials; and (c) require the use of recovered materials and environmentally-sound components to the maximum extent practicable without jeopardizing the intended end use of the item; and

(8) Arrange for the procurement of solid waste management services in a manner which maximizes energy and resource recovery. Agencies that generate heat, mechanical, or electrical energy from fossil fuel in systems that have the technical capability of using energy or fuel derived from solid waste as a primary or supplementary fuel shall use such capability to the maximum extent practicable.

8. **Special Requirements for Paper.** In implementing the policy in Paragraph 6.b. for paper and paper products acquired through the General Services Administration (GSA) or the Government Printing Office (GPO), Executive agencies shall:

(1) Designate that the paper and paper products identified in the "GSA Recycled Products Guide" or the "GSA Supply Catalog" be provided, where practicable, when ordering paper from GSA.

(2) Provide information to the Joint Committee on Printing and the Government Printing Office regarding the highest practicable percentages of recovered materials (including post-consumer recovered material) allowable in the various paper requirements of the agency subject to reasonable price, performance and availability limitations.

(3) Specify in paper orders, placed through either the Government Printing Office or the General Services Administration, or printed product orders, placed through the Government Printing Office, the highest minimum content paper specifications standard (including post-consumer recovered material standards) developed by the Joint Committee on Printing and the Government Printing Office for the intended use, subject to reasonable price, performance and availability limitations.

(4) Refrain from specifying coated papers, brand name papers, and other specialty or fancy grades of paper for products with a limited useful life such as annual reports, catalogues, training materials and telephone directories. Newsprint containing recycled content should be considered for many limited life documents.

(Note: Copies of the GSA "Recycled Products Guide" or the "GSA Supply Catalog" may be obtained by contacting the GSA Centralized Mailing List Service in Forth Worth, TX 76115: Commercial (817) 334-5215 or Autovan 739-7369).

c. **Affirmative Procurement Programs.** In addition to the responsibilities in subparagraph a. and b. above, Executive agencies must take the following actions:

(1) Develop agency specific affirmative procurement programs for each of the items covered by guidelines developed by the Environmental Protection Agency pursuant to subsection 6002(e) of RCRA (see 40 CFR 248-250, 252 and 253). These programs, as a minimum, must comply with RCRA subsection 6002(i) and must:

- (a) state a preference for the procurement of the item covered by the guideline
- (b) promote the cost-effective procurement of the covered item'
- (c) require estimates of the total amount of the recovered item used in a contract, certification of the minimum amount actually used, where appropriate, and procedures for verifying the estimates and certifications;
- (d) provide for the annual review and monitoring of the effectiveness of the program; and
- (e) include one of the following options, or a substantially equivalent alternative, to insure that contracts for items covered by the guidelines are awarded, unless waivers are granted pursuant to paragraph (2) below, on the basis of:
 - * Case-by-case procurement, open competition between products made of virgin materials and products containing recovered materials; preference to be given to the latter, or
 - * Minimum-content standards, which identify the minimum content of recovered materials that an item must contain to be considered for award.

(2) Base decisions to waive, or not to procure, guideline items composed of the highest percentages of recovered materials practicable of a determination that such items:

- (a) are not reasonably available within the time required;
- (b) fail to meet the performance standards set forth in applicable specifications or fail to meet the reasonable performance standards of the procuring agencies;
- (c) are only available at an unreasonable price, or
- (d) are not available from a sufficient number of sources to maintain a satisfactory level of competition.

(Note: Any determination under (2) (b), above, shall be made on the basis of National Institute of Standards and Technology guidelines when the items being procured are covered by such guidelines.)

(3) The responsibilities specified in c.(1) and (2) above, apply only to purchases of guideline items costing \$10,000 or more or where the quantity of such items, or of functionally-equivalent items, acquired in the course of the preceding year was \$10,000 or more.

(4) Compliance with RCRA, Section 6002, can also be waived where such compliance would be inconsistent with actions taken pursuant to guidelines for the management of solid waste promulgated by EPA under RCRA, Section 6907.

9. **Federal Acquisition Regulation (FAR) Councils.** The Defense Acquisition Regulatory Council and the Civilian Agency Acquisition Council shall conduct a thorough review of the relevant parts of the FAR to (1) assure that no unintended encumbrances to the acquisition of environmentally-sound, energy-efficient products and services are contained therein, and (2) that the procurement policies established by this Policy Letter are fully reflected in the FAR within 210 days of the effective date of this Policy Letter.

10. **Reporting Requirements.** In accordance with Section 502, Executive Order 12780 and subsection 6002(i) of RCRA, each Executive agency shall review annually the effectiveness of its affirmative procurement program and shall provide a report regarding its findings to the Environmental Protection Agency and to the OFPP beginning with a report covering Fiscal Year 1992. Such report shall be transmitted by December 15 each year. Reports required by this paragraph may be made available to the public.

11. **Effective Date.** This Policy Letter is effective 30 days after the date of issuance. While full implementation of these policies must await needed change to the FAR, it is expected that agencies will take all appropriate actions in the interim to implement those aspects of the policy that are not dependent upon regulatory change.

12. **Federal Acquisition Regulatory Council.** Pursuant to sections 6(a) and 25(f) of the OFPP Act, as amended, 41 U.S.C. 401 **et seq.**, the Federal Acquisition Regulatory Council shall ensure that the policies established herein are incorporated in the FAR within 210 days from the date this Policy Letter is published in the **Federal Register**. The 210 day period is considered a "timely manner" as prescribed in 41 U.S.C. 405(b).

13. **Information.** Questions or inquiries about this Policy Letter should be directed to Linda Mesaros or Cyndi Vallina, Office of Federal Procurement Policy, 725 17th Street, NW, Washington, DC 20503, telephone (202) 395-3501.

Allan V. Burman
Administrator

[Accessibility 05/18/01 OGP-CIO](#)

**PWR DIRECTIVE NO. 48:
SUSTAINABLE DESIGN AND CONSTRUCTION PRACTICES**

United States Department of the Interior

NATIONAL PARK SERVICE

Pacific West Region

600 Harrison Street, Suite 600

San Francisco, California 94107-1372

D24(PGSO-OM)

April 2, 2001

PACIFIC WEST REGION DIRECTIVE: PW-048

SUBJECT: SUSTAINABLE DESIGN AND CONSTRUCTION PRACTICES

Background

Implementing sustainable design and construction practices is the constant process of identifying and incorporating activities and actions during facility planning, design, construction, and operation to meet the following goals:

- Consume less energy and natural resources over the life of the facility.
- Ensure that resources such as water, air, and land are as clean or cleaner at the end of use as at the beginning.
- Ensure that the viability, integrity, and diversity of natural systems are protected, undiminished and maintained.
- Ensure that natural sound-scapes and dark skies are undiminished.
- Use green technologies and products that have less negative impacts on human health and the environment.
- Reduce the material entering landfills.
- Ensure compliance with all natural and cultural requirements.

The National Park Service's core mission emphasizes the concept of sustainability. The mission of the National Park Service in the 1916 Organic Act states:

"...which purpose is to conserve the scenery and natural and historic objects and the wildlife therein, and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations."

The NPS *Management Policies* (2001) state that "Park requirements for sustainable design and functionality include protection of the natural and cultural environments, resource conservation,

energy conservation, pollution prevention, defensible space for fire safety, and fostering education about sustainable design and practices.”

In the 1993 the National Park Service took a leadership role in developing the concept of sustainable design with the publication of *The Guiding Principles of Sustainable Design*. This guideline was an early attempt to define sustainable practices for park facility design. It was a collaborative effort intended to provide a basis for achieving sustainability in facility planning and design, emphasizing the importance of biodiversity, and encouraging responsible development decisions in parks and other conservation areas. The suggested principles identified in this book emphasize environmental sensitivity in planning, design, construction, operation and maintenance; the use of nontoxic materials, resource conservation and recycling; the integration of visitors with natural and cultural settings; and affecting not only immediate behaviors, but also the long-term beliefs and attitudes of visitors.

Since 1993, the entire design and construction industry has made significant progress integrating the concepts of sustainable design into its practices. This development in the private industry has greatly improved the feasibility and efficiency of implementing cost-effective sustainable development due to the greater availability of vendors, materials, suppliers, designers, resource data, and contractors.

Sustainable Design and Construction Regulatory Requirements

The President and Congress have recognized the benefits of sustainable practices in facility planning, design, and operations and have implemented the following regulatory requirements:

- Executive Order 13148 – “Greening the Government Through Leadership in Environmental Management,” (April 22, 2000). Section 207 of this executive order requires “each agency to promote the sustainable management of federal facility lands through the implementation of cost-effective, environmentally sound landscaping practices and programs to reduce adverse impacts on the natural environment.”
- Executive Order 13123 – “Greening the Government Through Efficient Energy Management,” (June 3, 1999). This executive order requires the use of life-cycle cost measures to improve energy efficiency and water conservation, the use of ENERGY STAR-designated energy efficiency levels into all specifications for new construction and renovation, and to implement sustainable design principles into siting, design, and construction of new facilities.
- “Comprehensive Procurement Guideline for Products Containing Recovered Materials (CPG)” 40 CFR 247 as required by Resource Conservation and Recovery Act (RCRA) and reinforced by Executive Order 13101, establishes procurement requirements for EPA designated products. As of January 19, 2000, 54 products made from recycled or recovered content have been listed in the CPG. Agencies must ensure that 100% of their purchases of products meet or exceed EPA guidelines unless written justification states that a product is not available within a reasonable timeframe, does not meet performance standards, or is an unreasonable cost.
- Executive Order 13101 – “Greening the Government Through Waste Prevention, Recycling, and Federal Acquisition,” (September 14, 1998). This executive order requires federal

agencies to incorporate waste prevention and recycling in the agency's operations and work to increase and expand markets for recovered materials through greater federal government preference and demand for such products. In developing work plans, work statements, and specifications, agencies must consider the "elimination of virgin material requirements, use of bio-based products, use of recovered materials, reuse of product, lifecycle cost, recycle ability, use of environmentally preferable products, waste prevention and ultimate disposal."

- Executive Memorandum: "Environmentally and Economically Beneficial Practices on Federal Landscaped Ground," (April 26, 1994). This executive order requires the use of regionally native plants for landscaping on federal land and federally funded projects, where cost-effective and practical. It also requires facility managers to promote construction practices that minimize adverse effects on the natural habitat.
- Executive Order 12902 – "Energy Efficiency and Water Conservation of Federal Facilities," (March 8, 1994). Section 306 of this executive order requires new facilities leased or owned by the Federal government to be designed and constructed in a manner that minimizes the life cycle cost of the facility by using energy efficiency, water conservation, or solar (or other renewable) energy technologies.
- Executive Order 12852 – "President's Council on Sustainable Development," (June 29, 1993). This executive order established a council to advise the President on matters involving sustainable development and to develop a national sustainable development action strategy that will foster economic vitality.
- Title 10 CFR Part 435, "Energy Conservation Voluntary Performance Standards for New Buildings: Mandatory for Federal Buildings," (January 30, 1989). This Department of Energy regulation applies to all new buildings and multi-family high rise buildings. These performance standards are designed to achieve the maximum practicable improvements in energy efficiency and increase in the use of non-depletable sources of energy.

The full text of these regulations and orders can be found at this website:

www.nps.gov/renew/regulations/htm

Implementing Sustainable Design and Construction Practices

Sustainable design criteria will be applied to all new and renovated Pacific West Region facilities, integrating sustainable materials and systems to the maximum extent possible to provide for a cost effective, durable facility, with reduced impacts on the environment. NPS construction planners, designers, and facility managers should work collaboratively on the project development to ensure the integration of all elements of sustainable development are incorporated throughout the planning and design process.

Sustainable design principles will be implemented in all stages of the design process, and most importantly in the earliest stages. The greatest payback for life cycle savings is in the early planning and program development versus the final construction documents. While it is important to specify and use recycled products, sustainability begins with a good scope of work definition. In many cases the most sustainable solution is to do nothing, rehabilitate an existing facility, or lease facilities outside park boundaries rather than constructing a new facility in the park.

The following critical stages should be integrated into all designs to ensure sustainable development:

- **Planning and project definition:** Project concepts, goals and budgets are established with sustainability in mind. This is the point where the project is evaluated for its actual need, size, and potential for facility reuse. Typically, the most sustainable projects are to reuse existing facilities and to reduce the size to the minimum requirements.
- **Site planning:** Facilities should be located for the maximum energy and transit efficiencies, minimal utility infrastructure requirements, and park resource protection. Often the most sustainable site will be leasing facilities outside park boundaries in order to minimize the impacts from construction and the long-term impacts of employee transportation and infrastructure requirements on park resources.
- **Architectural and engineering consultant work:** All indefinite quantity contracts, task orders, and scopes of work with architectural and engineering consultants should include clauses with sustainable design requirements and should reference this regional directive.
- **Schematic designs and alternatives:** During the initial design development of facilities, design teams should address both new construction and renovation alternatives to assess the preferred alternative based upon a life cycle cost analysis.
- **Life cycle cost analysis:** This is the cost accrued throughout the “useful” life of a building or material. Life cycle costs address the capital costs involved in production, operational and maintenance costs, and costs for disposal of a building or material.
- **Energy efficient technologies:** All designs will include the installation or retrofitting of equipment and fixtures to maximize conservation of water and electricity. All major rehabilitation and new construction will be assessed for the feasibility of cost-effective photovoltaic installation.
- **Construction documents development:** Design teams will incorporate specific sustainable products into facility design. Use of recycled and green building products should be an integral part of the construction drawings and specifications. Product sources are available in appendix A of this document.
- **Construction:** Waste reduction, installation practices that maintain good indoor air quality, and protection of water quality and natural resources are high priorities during construction of a sustainable facility. All buildings should be designed with deconstruction in mind.
- **Demolition and waste management:** Construction debris makes up 15-30% of landfill wastes. Specifications and construction practices should be implemented to minimize this waste stream. Demolition should be accomplished by deconstruction. Waste materials from demolition and construction should be recycled where economically feasible. The reuse of items removed during demolition is preferred to recycling.
- **Occupancy, operations and maintenance:** Even with the best designed buildings, the final success is dependent upon successful operation and maintenance. All facilities should be commissioned to ensure that all elements function as designed, and that the facility manager is aware of proper operating and maintenance procedures as well as opportunities for implementing sustainable practices.
- **Visitor education:** Interpretive materials and displays should be provided to demonstrate the success of sustainable efforts implemented in park areas.

Minimum Standards for Sustainable Design and Construction Practices

The best sustainable products are constantly changing and the designer must keep updated on the current best product for the intended purpose. Products that are frequently used in NPS facility designs include the following minimum standards:

- Recovered materials: The Comprehensive Procurement Guidelines requires the use of 54 mandatory items, including a wide variety of products used in the construction trade, including concrete, insulation, carpet, paint, floor tiles, and restroom dividers. Designers should refer to www.epa.gov/cpg for additional product specifications.
- Wood products: All wood products shall come from sources that are certified as practicing sustainable forest management as recognized by the Forest Stewardship Council (FSC). Both the Forest Stewardship Council (www.fscus.org) and the Certified Forest Products Council (www.certifiedwood.org) can be consulted for certification and information. Recycled plastic or renewable resource/bio-based products should be considered for wood product substitution where appropriate.
- Plumbing fixtures and equipment: All fixtures and equipment shall be water conserving and meet the requirements of “Greening Federal Facilities” (www.eren.doe.gov/femp/greenfed/index.html). Existing restrooms shall be retrofitted with water conservation devices and waterless urinals as part of any utility rehabilitation or new construction.
- Electrical fixtures and equipment: All fixtures and equipment shall be energy conserving and meet the requirements of “Greening Federal Facilities” (www.eren.doe.gov/ee/buildings.html) and shall be ENERGY STAR labeled products (www.energystar.gov). Lighting shall incorporate indirect day-lighting to reduce electrical lighting requirements. Automatic lighting controls shall be installed as part of any remodel or utility project.
- Mechanical equipment: All equipment shall be energy conserving and meet the requirements of “Greening Federal Facilities” (www.eren.doe.gov/ee/building.html) and shall be ENERGY STAR labeled products (www.energystar.gov).
- Demolition and construction waste management: When economically feasible demolition shall be accomplished by deconstruction and waste materials from demolition and construction debris should be recycled. The reuse of items removed during demolition is preferred to recycling.
- Indoor air quality: All adhesives, caulking, sealants, paints, and carpet shall have the lowest possible Volatile Organic Compounds (VOC), and which meet the requirements of the manufacturer of the products involved. Wood and agrifiber products with urea formaldehyde products shall be avoided. Materials with high VOC content shall be allowed to cure prior to installing finish materials. Buildings shall have a final air flush-out period prior to occupancy.
- Landscaping: Where conditions permit, the site shall be landscaped for low maintenance and water conservation with plants that are either native or well adapted to local growing conditions.
- Exterior lighting: Outdoor lighting shall be designed to minimize light pollution and conserve energy while maintaining safety. Carefully match outdoor lighting levels with the application and use no more than absolutely necessary. Photovoltaic and low voltage lighting should be

considered for site lighting. Designers can refer to “Illuminating Engineering Society of North America Manual: Lighting for Exterior Environments” (www.iesna.org)

- Water and wastewater treatment: Treatment processes shall minimize the use of chemicals, energy, and complicated technologies and maximize the natural biological treatment processes. Properly designed conventional septic/leach field, sand filters, and stabilization ponds as well as alternative constructed wetlands, aquaculture ponds, and reuse can provide cost-effective wastewater treatment systems.
- Storm Water Management: Designs should reduce the consolidation of storm water runoff per best management practices and the use of bioengineering for treatment of storm water runoff and sediment control. Storm water management designs shall be in compliance with the “National Pollutant Discharge Elimination System” permit requirements. (www.epa.gov/owm/sw/phase2)
- Road and Paving projects: Designs should maximize the amount of permeable area and minimize the amount of runoff. Where possible reuse existing onsite materials to reduce energy consumed by producing new materials and importing new materials from offsite. The most common means of reducing material consumption requirements and listed in order of applicability to small to large size projects, include: a) pulverizing existing deteriorated pavements to be used as aggregate base and, b) cold in place recycling of existing pavement. Hot mix asphalt that contains a percentage of recycled asphalt, glass and/or rubber tires shall be specified in areas of availability. Road base aggregate produced from recycled concrete, asphalt, and brick products shall be specified in areas of availability or crushed onsite for larger projects.

Sustainable Design and Construction Desired Results

The Pacific West Region should be a leader in implementing sustainable design practices in all planning, design, and construction projects. In order to measure our success, the *Leadership in Energy and Environmental Design* (LEED™) rating system will be used to evaluate all new construction and major facility rehabilitation projects:

Where appropriate, all new and renovated NPS facility designs will be self-evaluated by the LEED rating system. The US Green Building Council developed the LEED rating system to assess facility designs for sustainability. The LEED rating system is a self-assessing system designed for rating new and existing commercial, institutional, and high-rise residential buildings. LEED is based on accepted energy and environmental principles and strikes a balance between known effective practices and emerging concepts. It is a featured-oriented system where credits are earned for satisfying each criterion. Different levels of green building certification are awarded based on the total credits earned. The target goal for NPS designs in the Pacific West Region will be the “Certified Level.”

The LEED rating system primarily addresses building construction and there are no current measuring systems for the majority of our construction and rehabilitation projects, i.e. roads and utility system replacements. These non-building type construction and rehabilitation projects should incorporate sustainable design elements from LEED and other reference sources and should be self-evaluated for sustainability. The US Green Building Council is currently developing additional standards for smaller commercial buildings and residential, which will be more appropriate for NPS

projects. Large building and utility projects with mechanical systems shall be internally reviewed by the regional energy coordinator.

/s/ William C. Walters
for

John J. Reynolds
Regional Director, Pacific West Region

RESPONSIBLE OFFICES: Facility Management, Columbia Cascades Support Office, Pacific Great Basin Support Office, and Pacific Islands Support Office

DISTRIBUTION: Directorate and Superintendents, Pacific West Region

APPENDIX A

Sustainable Design and Construction Products and References

As the construction industry continues to incorporate sustainable design processes, the market for materials continues to expand. Designers need to keep constantly abreast of the best sustainable product for the intended purpose. At a minimum, the following Sustainability reference documents should be available to designers working on NPS projects.

- NPS websites for sustainability:
 - Greening of the National Park Service* (www.nps.gov/renew)
 - Sustainable Practices and Opportunities Planning* (www.nps.gov/sustain/spop)
 - DSC sustainability web page: (www.nps.gov/sustain)
- *Whole Building Design Guide*: Good overall site for sustainable building information. Energy issues are covered extensively and information on productivity is provided. (www.wbdg.org)
- *EPA Environmentally Preferable Purchasing Program*: Includes “how to” information and resources on purchasing guidelines. (www.epa.gov/opptintr/epp/)
- *LEED Sustainable Building Technical Manual*: The manual offers step-by-step guidelines for energy and resource-efficient building during predesign, design, construction, operations, and management. (www.usgbc.org/programs/sbtm.htm)
- *Greening Federal Facilities*: An energy, environmental, and economic resource guide for the federal facility manager. (www.eren.doe.gov/femp/greenfed/index.html)
- *Environmental Resource Guide*, American Institute of Architects: Two three inch binders with valuable resource data on sustainable architectural products, organized by CSI Master Format system (available from AIA).
- *Green Spec Binder*: The Environmental Building New Product Directory and Guideline Specifications is organized according to the CSI Master Format system and features 1,200 green building products. (www.greenspec.com)
- “Green Building Materials – A Guide to Product Selection and Specifications” by Ross Spiegel and Dru Meadows. (www.amazon.com)
- *United States Postal Services Green Specs*: An electronic specification package listing both the USPS standard specification and a green alternative specification organized according to the CSI Master Format system. Updated annually and available for low cost purchase from Corporate Visions Inc (202-833-4333).
- *Solstice*: An online source for sustainable energy information from the Center for Renewable Energy and Technology, including a very good database and search capability for sustainable topics. (www.solstice.crest.org/index.html)
- *Greenbuilders Sourcebook*: A source of green building products and services primarily for residential construction and good information on recycled carpet products. (www.greenbuilder.com/sourcebook/)
- *Environmental Building News*: A very good monthly newsletter on sustainable building products and systems (www.buildinggreen.com)

- *Recycling and Waste Management During Construction*, King County, Washington: A very good data source and specifications for recycling of construction project debris and demolition materials. (www.metroke.gov/procure/green/wastemgt.htm)
- *Waste Spec*, Triangle J Council of Governments: A great resource for detail specifications for building removal and deconstruction. (www.tjcog.dst.nc.us/tcog)
- *Energy Efficiency and Renewable Energy Network (EREN)*, US Department of Energy information network. Comprehensive resource for DOE's energy efficiency and renewable energy information, plus access to more than 600 links and 80,000 documents. (www.eren.doe.gov/)
- Asphalt Recycling and Reclaiming Association provides technical information for reuse of asphalt paving projects for road construction and resurfacing. (www.arra.org/)
- Assateague Island National Seashore *Sustainable Design Decision Flow Chart*: A good checklist to evaluate design alternatives for sustainability criteria.

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National Park Service
Pacific West Region
1111 Jackson Street, Suite 700
Oakland, CA 94607

D52(PGSO-AC)

March 12, 2002

PACIFIC WEST REGION DIRECTIVE: PW-051

SUBJECT: Environmentally Preferable Purchasing Policy

The Pacific West Region is a premier environmental advocate committed to following Government-mandated programs and policies as well as seeking improvements to these efforts in support of our Regional Servicewide goals for Environmental Leadership. Our Region recognizes the importance of creating markets for materials recovered in our recycling programs, reducing the volume and disposal costs of sold waste sent to our landfills, and making more efficient use of our natural resources. All of these activities will help reduce our impact on global warming, and serve as a model for Federal agencies, our neighboring communities, and the visiting public.

Therefore, in all efforts of park operations, the Pacific West Region will strive, to the maximum extent practical, to:

- Develop a program to prevent or reduce waste before products and services are acquired;
- Educate park employees on the opportunities to purchase EPA designated Comprehensive Procurement Guide (CPG), biobased, and other environmentally preferable products and promote the opportunities where these products can be used;
- Purchase and use products and materials which are made from recycled or recovered content or which have other environmental attributes;
- Conduct acquisitions which incorporate environmental considerations into all aspects of planning, development of workplans and specifications, and contract administration;
- Conduct procedures for monitoring, reviewing, and reporting on each park's environmentally preferable purchasing program as outlined in the guideline *How to Purchase Environmentally Preferable Products and Services in the National Park Service Pacific West Region* which will be distributed separately to each park.

/s/ Arthur E. Eck
(signed original on file)

John J. Reynolds

Regional Director, Pacific West Region

RESPONSIBLE OFFICE: Office of Contracting and General Services, Pacific Great Basin
Support Office

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UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

Pacific West Regional Office
600 Harrison Street, Suite 600
San Francisco, California 94107-1372

IN REPLY REFER TO:
S38 (PWRO-DRD)

OFFICIAL CORRESPONDENCE VIA ELECTRONIC MAIL
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April 21, 1999

Memorandum

To: Chief's of Maintenance and Procurement Agents, Pacific West Region

From: Regional Director, Pacific West Region

Subject: Use of Re-refined Oil and Environmentally Preferred Products

Recently all Chief's of Maintenance were sent a copy of the memorandum written by John Berry, Assistance Secretary, Policy, Management and Budget, requesting compliance with the use of re-refined oil and other environmentally preferred products. This memorandum is again attached for your reference (oil1doi.doc). I am taking this opportunity to restate the government's objective to purchase and use environmentally preferable products, including services under contract. In addition, we need to assess where waste prevention activities can be incorporated into our daily practices, including reuse of products, reduced packaging, buying in bulk where cost-effective, toxic product substitution, and elimination of waste before it is created.

Please start by examining the feasibility of substituting re-refined motor oil for virgin oil in fleet vehicles. Because re-refined oil meets the same performance standards as virgin, and is competitive in price, only where it is not available may virgin oil be substituted. Where not available, I ask that you continue to seek out sources of re-refined oil; let your local vendors know that you would like them to supply re-refined oil in the maintenance of NPS vehicles. GSA has contracted with the Department of Defense Logistics Agency to manage lubricants and fuels. DoD offers a closed loop recycling system and details are provided in the attachments oil2dod and oil3dod. Jim Fazzio, DoD Product Executive, is very helpful in ensuring that the closed loop system can accommodate park needs. Jim Fazzio can be reached at 800-345-6333.

An excellent reference is the "Greening the Government: A Guide to Implementing EO 12873" (now EO 13101). This guide has testimonials from the three US automobile manufacturers and GSA encouraging the use of re-refined engine oil. Each park was mailed a copy of this guide last year.

The Alternative Agricultural Research and Commercialization Corporation Source Book contains product information and vendors for biobased lubricants. The web site is:
<http://www.usda.gov/aarc/srbk/inoils.html>

Sources of distributors and vendors for re-refined oil can be found at:
<http://www.epa.gov/epaoswer/non-hw/procure/pdf/voils.pdf>

For your reference, I have also included a policy statement on the procurement of re-refined oil (oil4nps.doc).

Questions regarding the recycling of used oil and the DoD contract should be directed to Steve Mitchell, Regional Coordinator, Hazardous Materials Program, at 415-427-1376. Questions regarding environmentally preferable purchasing and the procurement of re-refined oil should be directed to Sonya Capek, Regional Coordinator, Solid Waste Program, at 206-220-4271. Contact Sonya if you need another copy of the Greening the Government Guide of the Sourcebook.

Environmentally preferable purchasing, buying products with recycled content, and toxic product substitution support the Resource Conservation and Recovery Act, EPA's Comprehensive Procurement Guidelines, Executive Order 13101: Greening the Government Through Waste Prevention, Recycling, and Federal Acquisition, and the NPS Greening the Parks and Environmental Leadership program. By instituting this one of many environmentally preferable purchasing opportunities, we will be setting an example within the federal community and reaffirming our goal of responsible resource stewardship. I know I can count on your support as we meet this exciting challenge.

John J. Reynolds

Attachments

State-by-State List of Commercial Re-Refined Oil Sources for the Pacific West Region
Compiled by the Office of the Federal Environmental Executive
www.ofee.gov

National Distributors

Grease Monkey International
1-800-822-7706
www.greasemonkeyintl.com/locator/locator.html

Hicks Oils
Bo Murrey or Tim O'Brien
636-947-0266

Lilyblad Petroleum
253-572-4402

Safety Kleen
John Cutshall
303-635-1592 or 1-800-525-5739

California

Jankovich Company - Marla Carlson
14066 Garfield; Paramount, Ca 90723
800-650-0200
Brand Name: America's Choice

BC Stocking - Claude Brown
PO Box 567; Vacaville, CA 95696
800-550-8060
Brand Name: America's Choice

Hawaii

Earl Harbin -- Pacific Island Petroleum
433 Kamakee; Honolulu, HI
808-589-1144
Brand Name: Ecogreen

W.G. "Kimo" Fo -- Delta Pacific Services
P.O. Box 893123; Mililani, HI 96789-0123
808-255-9989
Brand Name: N/A

Nevada

Auto Tech Center
917 Nevada Highway; Boulder City, NV 89005
Brand Name: Nature's Choice

Heartland Automotive Services, Inc. - Store #1975 -
Rancho
4531 North Rancho Road; Las Vegas, NV 89130
702-656-8000
Brand Name: Nature's Choice

Heartland Automotive Services, Inc. - Store #2029 -
Twain
430 East Twain; Las Vegas, NV 89109
702-369-8823
Brand Name: Nature's Choice

Heartland Automotive Services, Inc. - Store #2031 -
Eastern
1409 North Eastern Avenue; Las Vegas, NV 89101
702-842-4513
Brand Name: Nature's Choice

Heartland Automotive Services, Inc. - Store #2037 - East
Sahara
2020 East Sahara Avenue; Las Vegas, NV 89104
702-457-5510
Brand Name: America's Choice

Heartland Automotive Services, Inc. - Store #2041 - West
Sahara
3900 West Sahara Avenue; Las Vegas, NV 89102
702-367-8300
Brand Name: Nature's Choice

Heartland Automotive Services, Inc. - Store #2042 - Craig
4716 West Craig Road; No. Las Vegas, NV 89030
702-396-3160
Brand Name: Nature's Choice

Heartland Automotive Services, Inc. - Store #2487 - Fort
Apache
1111 South Fort Apache; Las Vegas, NV 89117
702-967-1010
Brand Name: Nature's Choice

Heartland Automotive Services, Inc. - Store #2665 -
Rainbow
3420 South Rainbow; Las Vegas, NV 89102
702-871-5539
Brand Name: Nature's Choice

Heartland Automotive Services, Inc. - Store #2666 -
Charleston
4310 East Charleston; Las Vegas, NV 89104
702-459-6341
Brand Name: Nature's Choice

Heartland Automotive Services, Inc. - Store #2667 -
Decatur
333 South Decatur; Las Vegas, NV 89107
702-870-1317
Brand Name: Nature's Choice

Heartland Automotive Services, Inc. - Store #2668 -
Windmill
2583 Windmill Parkway; Henderson, NV 89104
702-263-4007
Brand Name: America's Choice

James West Automotive
2905 W. Washington Ave.; Las Vegas, NV 89107
702-737-0133
Brand Name: Nature's Choice

Washington

Jiffy Lube Store #2051 - Thackery
251 NE 45th Street; Seattle, WA 98105
206-632-4120
Brand Name: Ecogreen

Jiffy Lube Store #2063 - Kent E. Hill, South
10312 SE 256th; Kent, WA 98031
253-850-2758
Brand Name: Ecogreen

Jiffy Lube Store #2066 - Silverdale
9584 Ridgetop Blvd., NW; Silverdale, WA 98383
360-613-2551
Brand Name: Ecogreen

Jiffy Lube Store #2074 - Kent Valley
309 So. Washington; Kent, WA 98032
253-852-8515
Brand Name: Ecogreen

Jiffy Lube Store #2075 - University Village
4902 25th NE; Seattle, WA 98105
206-524-1909
Brand Name: Ecogreen

Jiffy Lube Store #2078 - Midway
23610 Pacific Hwy., S; Kent, WA 98032
253-878-3075
Brand Name: Ecogreen

Jiffy Lube Store #2079 - Burien
13654 1st Avenue, S; Seattle, WA 98168
206-244-0362
Brand Name: Ecogreen

Jiffy Lube Store #2229 - Bonney Lake
19210 Hwy 410; Bonney Lake, WA 98390
253-891-2494
Brand Name: Ecogreen

Jiffy Lube Store #2232 - West Seattle
4000 SW Alaska Street; Seattle, WA 98116
206-932-1592
Brand Name: Ecogreen

Jiffy Lube Store #1118 - Kent E. Hill N.
24037 104th Avenue, SE; Kent, WA 98031
253-859-9625
Brand Name: Ecogreen

Jiffy Lube Store #1096 - Northgate
1020 Northgate Way; Seattle, WA 98125
206-361-2628
Brand Name: Ecogreen

Jiffy Lube Store #1175 - Parkland
13833 Pacific Avenue, S; Tacoma, WA 98444
253-536-7727
Brand Name: Ecogreen

Jiffy Lube Store #2597 - Federal Way North
30509 Pacific Hwy, S; Federal Way, WA 98003
253-941-3400
Brand Name: Ecogreen

Jiffy Lube Store #2630 - Puyallup North
3912 So. Meridian; Puyallup, WA 98373
253-770-9686
Brand Name: Ecogreen

Jiffy Lube Store #2631 - Tukwila
6816 S. 180th Street; Seattle, WA 98188
206-575-7830
Brand Name: Ecogreen

Jiffy Lube Store #2575 - Oak Harbor
31980 State Route 20; Oak Harbor, WA 98277-5215
360-675-9227
Brand Name: Ecogreen

Jiffy Lube Store #2577 - Lake City
13015 Lake City Way, NE; Seattle, WA 98125-4428
206-367-5925
Brand Name: Ecogreen

Ingraham Oil - Steve Ingraham
3816 84th St. Ct., SW; Lakewood, WA 98499
253-584-1787
Brand Name: America's Choice

Closed Loop Re-refined Oil Program FY 2001 Prices

Defense Logistics Agency
www.dscr.dla.mil/products/pol/polintro.htm

NSN	Viscosity	Unit of Issue	Price
Basic Re-refined MIL-L-2104 Oil Prices			
9150-01-421-1427	15W-40	QT	\$1.20
9150-01-421-1424	15W-40	CN	\$22.99
9150-01-421-1432	15W-40	DR	\$226.18
Closed Loop Re-refined MIL-PRF-2104 Oil Prices			
9150-01-438-6076	15W-40	QT	\$1.16
9150-01-438-6082	15W-40	CN	\$15.97
9150-01-438-6079	15W-40	DR	\$167.21
9150-01-438-6084	15W-40	GL	\$2.86
9150-01-438-7526	30	QT	\$1.05
9150-01-438-7536	30	CN	\$15.97
9150-01-438-7518	30	DR	\$161.55
9150-01-438-7897	30	GL	\$2.86
9150-01-438-7956	40	DR	\$162.44
9150-01-438-7965	40	GL	\$3.00
Basic A-A-52306 Heavy-Duty Diesel Motor Oil			
9150-01-422-8899	15W-40	BX of 12	\$10.98
9150-01-422-8750	15W-40	CO	\$16.67
9150-01-422-8746	15W-40	DR	\$159.35
9150-01-422-9250	30	BX of 12	\$10.67
9150-01-422-9247	30	CO	\$16.85
9150-01-422-8997	30	DR	\$176.76
9150-01-422-8901	40	DR	\$204.50
Closed Loop Re-refined IAW CID A-A-52306 Oil			
9150-01-438-5905	15W-40	BX of 12	\$10.74
9150-01-438-6064	15W-40	CO	\$16.80
9150-01-438-6066	15W-40	DR	\$155.90
9150-01-438-6071	15W-40	GL	\$2.69
Basic A-A-52039 Commercial Motor Oil			
9150-01-422-9253	5W-30	BX of 12	\$10.68
9150-01-422-9326	5W-30	DR	\$157.61
9150-01-413-6897	10W-30	BX of 12	\$9.76
9150-01-413-6892	10W-30	CO	\$16.21
9150-01-413-6990	10W-30	DR	\$164.96
Closed Loop Re-refined Oil IAW CID A-A-52039			
9150-01-438-5875	10W-30	BX of 12	\$10.74
9150-01-438-5882	10W-30	CO	\$16.93
9150-01-438-5891	10W-30	DR	\$153.35
9150-01-438-5933	10W-30	GL	\$2.63
Commercial Heavy Duty Oils			
*Available only to non-DoD Customers			
9150-01-460-8393	15W-40	BX of 12	\$10.82
9150-01-460-8379	15W-40	CO	\$16.93
9150-01-460-8367	15W-40	DR	\$156.17
9150-01-460-8432	15W-40	GL	\$2.69

Contact Jim Fazzio, product executive for re-refined oil, at 804-279-4908, DSN 695-4908, or e-mail jfazzio@dscr.dla.mil .

PACIFIC WEST REGION
600 Harrison Street, Suite 600
San Francisco, California 94107-1372

**OFFICIAL CORRESPONDENCE VIA ELECTRONIC MAIL
NO HARD COPY TO FOLLOW**

S72(PGSO-AC)

June 15, 2000

Memorandum

To: All Superintendents, Pacific West Region

From: Acting Regional Director, Pacific West Region

Subject: Environmentally Preferable Purchasing, Buying Recycled, and the
Comprehensive Procurement Guideline

I am proud of how our Parks in the Pacific West Region have embraced recycling and other waste reduction measures. To truly succeed in recycling, however, we must boost our efforts to purchase products made from recycled content. We also have an opportunity to look beyond buying recycled to Environmentally Preferable Purchasing (EPP).

Environmentally Preferable (EP) means products or services that have a lesser or reduced affect on human health and the environment when compared with competing products or services that serve the same purpose. EP may consider raw materials acquisition, production, manufacturing, packaging, distribution, reuse, operation, maintenance, or disposal of the product or service. Green Procurement provides a multitude of benefits including reducing pollution, our dependency on nonrenewable resources, energy consumption, and the amount of waste sent to the landfill. In addition, Green Procurement helps create and sustain new markets and jobs. The Federal Government has tremendous purchasing power, therefore, each of us can demonstrate our support for a sustainable future by reviewing our purchases and the use of new Environmentally Preferable products and technologies.

Congress recognized the important of "buying recycled" in 1976 by enacting Section 6002 of the Resources Conservation and Recovery Act (RCRA). Congress directed Environmental Protection Agency (EPA) to designate products with recovered content, known as the Comprehensive Procurement Guideline (CPG) (40 CFR 247). This list, found in the attached Environmental Audit Green Procurement EnviroCheck Sheet, consists of 54 items in a variety of categories, such as construction, landscaping, vehicle, and office products. The CPG is a Federal requirement. This means that you should first check the CPG to see if an item proposed for purchase is listed. If it is, then you should buy a product that contains the highest practical percentage of recovered content. EPA has also developed Recovered Materials Advisory Notices (RMANs) that specify recycled content ranges, as shown in the CPG. However, there are many quality and competitively priced products that can be purchased above the recommended

minimum recycled content. Quality paper, for example, can be purchased above the Federally required 30% post consumer content, as well as be chlorine free. Please note that the CPG is not all-inclusive – it does not preclude the purchase of other environmental products that may not be listed. For example, only carpet made from recycled PET i.e., (plastic bottles) is listed, but other excellent environmental carpet options include nylon face fiber with some recycled content and a 100% reclaimed backing. The use of biobased products is also strongly encouraged.

If the product you want to purchase is made from a recovered material listed on the CPG, then only if the price is unreasonably high, if the product is not available, or does not meet your performance standards, should you purchase it without recovered content. EPA has determined that the products represented in the CPG are generally readily available, competitively priced, and perform well.

The Environmental Audit Program is a good vehicle to begin documenting what parks are doing in Green Procurement, both in the pre-site questionnaire and in the Green Procurement EnviroCheck Sheet. The EnviroCheck Sheet Checklist questions are useful in determining what can be done in support of a green procurement program. The attached EnviroCheck Sheet also provides additional information on green procurement definitions, regulatory requirements, determining what is an environmentally preferred product, implementing a green procurement program, and helpful web sites.

EPA has instituted a program to inspect Federal facilities for compliance with Section 6002 of RCRA and Section 403 of EO 13103 Greening the Government Through Waste Prevention, Recycling and Federal Acquisition. Its focus is the purchase and use of vehicle products, specifically, re-refined oil and lubricants, reclaimed engine coolant, and retread tires. This is a pilot program and only some Federal facilities will be audited under this program. For more information, see <http://es.epa.gov/oeca/fedfac/policy.html>

The Pacific West Region will be working towards a regional Green Procurement plan and program under the Director's Strategy for Sustainability, and will be providing additional guidance for parks. We will soon be initiating a pilot program to record and track CPG purchases in several parks. These efforts will support future DOI reporting requirements under EO 1310.

Buying products with recovered content is just one important environmental attribute. Keeping this in mind, our efforts can result in an even bigger environmental impact. One way of doing this is to ask ourselves the following questions before we make a purchase:

- Is it needed to begin with?
- Can another product be reused?
- What kind of packaging does it come in?
- Can it be purchased in bulk, or in just the right amount so that there is no waste?
- If it is toxic, is there another non-toxic substitute?
- Is it durable, repairable, and does it perform well?
- Is it made from recycled content or does it have another environmental attribute?
- Is it biodegradable (can you grow it) and is it ozone friendly?
- Is it produced locally?
- Can we pay a higher price because lifecycle costs tell us that the product will last longer?
- Have we checked any claims or verified its attributes (i.e., Green Seal)?

Of course, products will not have all of these qualities, but we must decide what is the most important for our application, and where we can make the biggest impact in protecting our environment.

Buying recycled and environmentally preferable products and services is not just the business of the maintenance employee or the procurement staff; it is everyone's business. All parks are encouraged to work with our service providers and concessioners to implement the use of CPG products and to incorporate environmental purchasing into contracts and specifications, as well as in credit card purchases.

Questions regarding Green Procurement should be directed to Sonya Capek at 206-220-4271 (solid waste, recycling, CPG) or Steve Mitchell at 415-427-1376 (hazardous materials, pollution prevention, EPA inspection program). Questions concerning contracting should be directed to Jamie Sherrill at 415-427-1337 or Beth Faudree at 206-220-4041.

I know that you will support our Green Procurement initiatives to become a model for sustainable practices and a leader in environmental programs. I appreciate the achievements you already have made in this area, and I look forward to hearing from you as you meet the challenge of incorporating new ones into your operations.

/s/ James R. Shevock
(Signed original on file)
John J. Reynolds

Attachment: Green Procurement EnviroCheck Sheet

ENVIROCHECK SHEET



NATIONAL PARK SERVICE EnviroCheck Sheet

*Green Procurement
Revised Sept. 2001
For use in the PWR solid waste program.*

GREEN PROCUREMENT

Green procurement is the purchase of products and services that are considered **environmentally preferred** because they exhibit characteristics or properties that have less negative impacts on human health and the environment. These products may contain recycled materials or be more recyclable, be less toxic or more biodegradable, have less packaging or cost less to transport, perform better, be more durable, or use less energy or natural resources over their life.

As stewards of our nation's heritage, the National Park Service has a responsibility to demonstrate methods and technologies for pollution prevention and waste reduction. The Federal government is the nation's single largest consumer of products and services. Congress realized that focusing the purchasing power of the Federal government on procuring materials with recovered content could create a significant demand for recycled materials. Through green procurement, the Federal government can create markets for recovered materials and environmentally preferred products and services, spur competition, create business and employment opportunities, and enhance local and regional economies.

Scope of this EnviroCheck Sheet

This EnviroCheck Sheet focuses on environmentally preferable purchasing, or green procurement, as relates to E.O. 13101, The Resources and Conservation Recovery Act, and EPA's Comprehensive Procurement Guideline. It touches on energy efficient and pollution prevention green procurement, but these items are covered more fully in their respective EnviroCheck Sheets. Green procurement is one component of solid waste management (specifically, recycling) and more information on this topic can be found in the Solid Waste Management EnviroCheck Sheet.

Key Definitions

- **Environmentally Preferable Purchasing (EPP):** The purchase of products or services that have a lesser or reduced effect on human health and the environmental when compared with competing products or services that serve the same purpose. It may consider raw materials acquisition, production, manufacturing, packaging, distribution, reuse, operation, maintenance, or disposal of the product or service.
- **Recovered Material:** Waste materials and by-products that have been recovered or diverted from the solid waste stream.

- **Postconsumer Material:** A material or finished product that has served its intended use and has been discarded for disposal or recovered. Postconsumer material is a part of the broader category of recovered material.
- **Recycling:** The separation and collection of materials and products recovered from the solid waste stream and the subsequent remanufacture into usable products, and the purchase of these new products, includes composting.
- **Life Cycle Assessment:** The comprehensive examination of a product's environmental and economic aspects and impacts throughout its lifetime, including raw material extraction, transportation, manufacturing, use, and disposal.
- **Biobased Product:** Products (other than food or feed) that utilize biological products or renewable domestic agricultural (plant, animal, marine) or forestry materials.

Regulatory and Policy Requirements

Federal Statutes, Regulations and Executive Orders: The President and Congress have recognized the benefits of green procurement and have incorporated the affirmative procurement of environmentally preferred products into federal acquisition requirements.

- **Executive Order 13101 – Greening the Government Through Waste Prevention, Recycling and Federal Acquisition,** issued on September 14, 1998, requires Federal agencies to incorporate waste prevention and recycling in the agency's daily operations and work to increase and expand markets for recovered materials through greater Federal government preference and demand for such products. In developing work plans, work statements and specifications, agencies must consider the "elimination of virgin material requirements, use of biobased products, use of recovered materials, reuse of product, lifecycle cost, recyclability, use of environmentally preferable products, waste prevention (including toxicity reduction) and ultimate disposal."
- **The Resource Conservation and Recovery Act of 1976 (RCRA) Section 6002 (Federal Procurement)** establishes the Federal buy-recycled or affirmative procurement program. Congress directs Federal agencies to promote recycling by increasing their purchase of products containing recovered materials to the maximum extent possible. RCRA requires EPA to designate products that can be made with recovered materials and to recommend practices for buying these products. Affirmative procurement programs (APP) must have these elements: a preference program, a promotion program, procedures for vendor estimation, certification, and verification, and an annual review and monitoring program.
- **Comprehensive Procurement Guideline for Products Containing Recovered Materials (CPG) 40 CFR 247** as required by RCRA and reinforced by EO 13101, establish procurement requirements for EPA-designated products. As of January 19, 2000, 54 products made from recycled or recovered content have been listed in the CPG. Agencies must ensure that 100% of their purchases of products meet or exceed EPA guidelines unless written justification states that a product is not available within a reasonable timeframe, does not meet performance standards, or is an unreasonable price. EPA also recommends the percent of recycled and recovered content in the Recovered Materials Advisory Notice

(RMAN). EPA has determined that the CPG items are readily available, competitively priced, and perform well. Note that the CPG does not preclude the purchase of products with attributes other than recovered content. Designated EPA items are listed in the table provided in this EnviroCheck Sheet.

- **Other Statutes and Executive Orders** (i.e. Emergency Planning and Community Right to Know Act of 1986-EPCRA), various E.O.'s (i.e. 12843, 12844, 12845, 12856, 12902, 12969 – go to www.nara.gov/fedreg/eo.html for details) establish Federal affirmative procurement policies for products including Energy Star computer equipment, products containing less toxic materials, ozone depleting substances, and alternative fuel vehicles. E.O. 12856 Federal Compliance With Right-to-Know Laws and Pollution Prevention Requirements establishes reduction goals for toxic substances at Federal facilities of 50 % by December 31, 1999. E.O. 13134 Developing and Promoting Bio-based Products and Bioenergy encourages Federal agencies to procure biobased products designated by the USDA. EO 12902 Energy Efficiency and Water Conservation of Federal Facilities requires an energy reduction program of 30% by 2005.
- **The Federal Acquisition Regulation (FAR) 40 CFR 1, Part 23**, dated August 22, 1997, directs Federal agencies to incorporate policies for the acquisition of environmentally preferable and energy-efficient products and services to the maximum practical and consider environmental objectives in every purchasing decision. Applicable sub-parts include: Part 23.4 Use of Recovered Materials, Part 23.7 Contracting for Environmentally Preferable and Energy-Efficient Products and Services, and Part 23.8 Ozone-depleting Substances. The FAR (48 CFR Parts 2 and 4, et al., Federal Requirements Supporting Procurement of Recycling Products and Environmentally Preferable Services, Proposed Rule) is currently being revised to further address environmentally preferable purchasing requirements, including the application to micropurchases.

DOI and NPS Policy:

- **Department of the Interior (DOI) Acquisition Policy Release (DIAPR) 97-2, and DOI General Guidance on Pollution Prevention and Right-to-Know, Recycling and Green Acquisition, and Office of Federal Procurement Policy (OFPP) Policy Letter 92-4 Procurement of Environmentally Sound and Energy-Efficient Products and Services**, implement DOI and NPS green procurement policy to meet regulatory and EO requirements. These state that preference must be given to environmentally sound or energy efficient products when equal in price and other factors. **Contracting Officers Technical Instruction (COTI) 93-1** provides policy on green procurement for the NPS. *This COTI needs to be dated.*
- Green procurement supports a Department of Interior E.O. 13101 implementation goal to divert solid waste 40% by 2000, 45% by year 2005, and 50% by year 2010.

Approach to Green Procurement

Determining What Is An Environmentally Preferred (EP) Product

The following should be considered when selecting green products and services to make sure they are the most environmentally preferred:

- *Multiple Attributes* - Make sure one environmental product attribute is not offset by a more serious impact.
- *Life Cycle Perspective* - Make sure the environmental impacts and costs of a product consider the entire life of the item (i.e. manufacturing, transport and packaging, use, disposal).
- *Magnitude of Impact* - Consider the scale and reversibility of the product or service's environmental impact.
- *Local Conditions* - Make sure the product will work based on the Park's location and the product's intended use.
- *Product Attribute Claims* - Make sure the product and service contractor claims are accurate.

Implementing a Green Procurement Program

Each Park should work towards establishing a program to ensure that green procurement initiatives are implemented and are sustainable. Successful programs typically include eight key elements:

- *Green Task Force* - The Park should assemble a group to oversee the process and include staff involved in buying and using products (purchasing, maintenance, concessions staff, and so on).
- *Procurement Baseline* - The Park should assess current practices and product purchases to determine a baseline from which to develop their program.
- *Mission Statement and Goals* - The Park should establish green procurement policy and set purchasing targets. Percentage change goals rather than numerical targets should be established. Schedules and responsible parties should be identified and attainable product standards set.
- *Required Purchases* – The Park should establish procedures to procure mandated recycled content and EP products including CPG items, Energy Star computer equipment and energy/water efficient appliances. Documentation as to why a required purchase was not made should be kept on file.
- *Preferences in Purchasing* - Product specifications, Request for Proposals (RFPs), and other purchasing tools and selection processes should be designed to give preference to green

products and services. Parks should be willing to try new companies, wait a little longer to get the product, and search a little more for the right vendor. Parks should also review contractor and concessioner proposals and site work plans to incorporate green procurement.

- *Cost Calculation* - Parks should evaluate product life cycle costs. Green products may initially cost more, but may result in cost savings over the product life. Parks should be willing to pay more for new technology. WASO has limited funds available to offset some of the cost differential for green procurement.
- *Product Purchase and Testing* - The Green Task Force should obtain feedback from users on how the green product performs. If one product does not perform, Parks should be willing to try another. Parks should share performance successes and lessons learned through the National Green Alert and Maintenance Service-wide Discussion database (currently under revision), the NPS product performance database (in progress) and through other means.
- *Program Assessment and Growth* - The Park should track purchases against mission goals and purchase targets and increase target goals and types of products as their program progresses.
- *Awareness* - Green procurement requirements and goals of the Park should be disseminated to all levels of the organization so that green is considered not only in larger acquisitions but also in smaller purchases such as those by credit card. Parks should promote green procurement internally through fact sheets, posters, training, and discussion in staff meetings.
- *Education* - Parks should inform employees, visitors, partners, concessioners, and the community at large about green procurement success stories to promote environmental awareness. This can be accomplished through interpretive displays, brochures, home pages, bulletin boards, and during interpretive tours. Employees should be kept informed through training and electronic messaging.

Before You Buy and Where To Get Green Products

Before a purchase is made, the procurer and user should first ask whether the item is really needed, whether another more sustainable item could be used, what is the most efficient quantity (i.e. bulk or just enough to avoid waste). Also ask: What kind of packaging does it come in? Is it made from renewable resources, biodegradable, ozone friendly, or does it have a non-toxic alternative? Is it salvaged or reused material? Is it made from recycled content or have another environmental attribute? Is it durable, repairable, does it perform well? Is it produced locally? Can a higher price be paid because of lifecycle analysis? Have product claims been verified? Products will not have all these qualities, but the procurer and user must decide which is the most important and where is the biggest environmental impact.

Another concept some agencies are adopting is prescriptive purchasing, where the quantity purchased is controlled to avoid unnecessary waste, such as limiting the quantity of paint and thinner according to the square footage needing paint.

Evaluating products and services to determine if they are green can be complicated. Life cycle cost analysis and multiple attribute data can be difficult to obtain and assess. A number of government agencies and non-profit groups have developed green products listings. Information on green products and programs can be obtained from the sources identified in this EnviroCheck Sheet. Keep in mind that the technology for green products is rapidly changing and improving; some products may have had a poor track record in the past but have excellent performance and environmental attributes now.

Green Procurement Recordkeeping

Parks should keep track of green purchases in order to document compliance with regulations (e.g., the RCRA, CPG recycled content required products, Energy Star equipment purchases) and to determine if green procurement goals set for the Park are being met. Parks should additionally track contractor purchases to ensure compliance with regulations. NPS-wide reporting on green procurement is not currently required but may be mandated in the future under DOI reporting requirements which are being developed to set target goals for commonly used products.

Green Procurement Success Stories

Fort Vancouver NHS green procurement resource guide.

Yellowstone NP green cleaning products inventory and green product substitution, use of biobased lubricants, Durawood plastic lumber boardwalk.

Intermountain Region chemical inventory and green product substitution Cd-Rom and Guidebook.

Presidio green procurement CPG tracking and database development, use of green building materials (carpet and other flooring materials, reclaimed lumber, interior finishes, etc.).

Curecanti NRA Eco-Shake recycled content roof shingles.

Cape Cod NP retread tires and re-refined oil.

PWR Green Building Materials for Maintenance Training, June 1999.

Golden Gate NRA and Yosemite NP use of rerefined oil and biobased lubricants.

Assateague Island NS indigenous road and parking material (shells).

PWR Green Janitorial Products and Practices Guide.

SOURCES OF INFORMATION ON GREEN PROCUREMENT

Source	Contact Information (hot link)
US Environmental Protection Agency. EPA's web site for the Comprehensive Procurement Guideline (CPG): federal requirements for purchasing products with recycled content, product lists and suppliers, recommendations for credit card holders, and a new database for contract language, products, and various tools ("gus").	RCRA-hotline (800)424-9346 www.epa.gov/cpg/ www.epa.gov/opptintr/epp www.epa.gov/oppt/epp/gus.htm www.epa.gov/opptintr/epp/creditcard.htm
Government Services Administration (GSA). <i>Environmental Products Catalog</i> , GSA Advantage On-line Service.	(800) 848-8923 www.fss.gsa.gov/environ/
Defense Supply Center (DSC). On-line catalog with environmentally preferable product designations.	(800) 345-6333 www.dscr.dla.mil
Federal Energy Management Program (FEMP). Energy Efficiency and Renewable Energy Clearinghouse; technologies and equipment, Center for Excellence for Sustainable Development.	(800) DOE-EREL www.eren.doe.gov/femp www.sustainable.doe.gov/index.html
US Environmental Protection Agency, Energy Star. Energy efficiency guidance for office equipment, lighting, and buildings product certification program.	www.epa.gov/appdstar/purchasing/
LEED Green Building Rating System. U.S. Green Building Council, sustainable design and construction rating system.	(415)445-9500 www.usgbc.org/
Environmental Building News. Excellent technical newsletter on environmentally responsible design and construction. Green Spec Binder is a must-have tool for green specs, contains manufacturer's literature by CSI divisions.	(800) 861-0954 www.ebuild.com www.greenspec.com
Greenline. Paper publication on analysis of environmentally friendly papers.	(415) 721-4230 www.conservatree.com
Green Seal. Non-profit green product certification and research organization; listings of certified products; guidance.	(202) 588-8400 www.greenseal.org
Greening the Government: A Guide to Implementing EO 13101. Excellent reference manual from the Office of the Federal Environmental Executive. Web site has federal purchasing information and model APP.	(202) 260-1297 www.ofee.gov
King County Environmental Purchasing Program. Award winning program including specs, contract language, experience use of recycled content products and services.	www.metrokc.gov/procure/green/index.htm

King County Market. Excellent source of info. on sustainable building and recycled materials, linked sites.	www.metrokc.gov/market/map/index.htm
Alameda County, CA, Source Reduction and Recycling Board. Resourceful Purchasing: A Hands-On Buyers Manual.	(510)614-1699 www.stopwaste.org
Institute for Local Self-Reliance Carbohydrate Economy Clearinghouse for plant-based products of all kinds, search function.	www.carbohydrateeconomy.org/
JWOD. Javits-Wagner-O'Day and NIB/NISH. Mandatory sourcing includes products with environmental attributes.	www.jwod.com
NPS Green Alert Discussion Database. Electronic bulletin board posting information on pollution prevention, green procurement, Environmental Leadership, and solid waste management. Park sharing of green news, product performance and posting of questions.	<i>In process of being set up into Lotus Notes format.</i>
NPS, Hazardous Waste and Pollution Prevention Team, Washington, DC. Guidance on policy and funding. NPS, Environmental Leadership, Washington, DC.	(202) 565-1240 Carl Wang, Team Lead (202)565-1260 Shawn Norton, Program Lead

- **For other resources, see the Solid Waste Management Check Sheet.**

CHECKLIST ITEM	NOTES
<ol style="list-style-type: none"> 1. Check to see whether the Park has identified any goals for green procurement. If yes, check to see that the green procurement goals are disseminated to all levels of the organization so that green is considered in both large and small acquisitions, such as those made by credit card. 2. Identify any green procurement training completed or planned for park staff. 3. Verify that if the Park has prepared a pollution prevention plan, that green procurement is a key strategy in the plan. (E.O. 12856, E.O. 13101) 4. Check to see whether a process is in place to review excess property so that energy inefficient property is not procured or given away. 5. Check to see that construction and demolition waste is reused or recycled, and that revenues are kept in the park and used in the recycling program. 6. Verify that the Park is complying with green procurement requirements and goals in RCRA, other statutes, regulations and E.O.'s: <ul style="list-style-type: none"> • EPA designated products with recovered material (RCRA, E.O. 13101, CPG) - see no. 9 below. • Energy Star compliant computer products. (E.O. 12845) • Energy and water efficient products in the top 25% of their product class. (EPACT) • Products with less EPCRA hazardous materials. (E.O. 12856) • Record of non-procurement of CPG items based on price, performance, and availability. (RCRA, E.O. 13101) 7. Check to see if Park staff understand green procurement concepts (e.g. life cycle assessment, multiple attributes) through discussion with users and procurers. Check to see that Park staff have access to green procurement guidance and resources (policies and procedures, catalogs, facts sheets, Internet addresses and NPS points of contact). 	

CHECKLIST ITEM	NOTES
<p>8. Check to see what biobased engine and lubricating oil are being used.</p> <p>9. Check to see what non-toxic “green” cleaning products are being used. Is the Park familiar with PWR Green Janitorial Products and Practices Guide?</p> <p>10. Identify which CPG items on the previous list have been purchased in the last year. Mark the list. Specifically check the following E.O. 13101 – DOI implementation strategy items: re-refined motor oil, retread tires, reclaimed engine coolant, recycled content bathroom tissue and paper towels, recycled content or biobased trash bags, at least 30% post consumer content copy paper, and recycled content/recyclable carpet (can include nylon face fiber with 100% reclaimed backing or refurbished carpet). (RCRA, E.O. 13101, DOI Strategic Plan, CPG)</p> <ul style="list-style-type: none"> • Identify any chlorine free paper products, such as copy paper, paper towels, and bathroom tissue. (DOI Strategic Plan) • Environmentally preferable products not listed in the CPG, but which may have environmental attributes may also be identified here. <p>11. Verify that the Park incorporates environmentally preferable procurement into contracting and service provider procedures (E.O. 13101, E.O. 12902, FAR):</p> <ul style="list-style-type: none"> • Are environmentally preferable procurement and pollution prevention identified as ranking criteria in requests for proposals; are they incorporated into the SOW and specifications? • Are service providers made aware of NPA and Park-specific environmentally preferable procurement policies and goals? • Has the Concessioner included environmentally preferable procurement criteria in their documented Environmental Program (EMP) or in the concessions contract? • For contracts and services: <ul style="list-style-type: none"> ➤ How have requirements for virgin materials been eliminated? ➤ How will the contract promote the reuse of products? ➤ How does the contract incorporate use of recovered materials, biobased, recyclable, low or zero toxicity, and other EP products? <p>12. Identify any environmentally preferable procurement success stories that can be shared with other Parks and Concessioners. Include examples of waste reduction, green specs and contracts/services, and product performance.</p>	

EPA'S COMPREHENSIVE PROCUREMENT GUIDELINE RECYCLED CONTENT MINIMUMS:

Note: The content levels for all EPA recommendations should be read as % recovered fiber, including % postconsumer fiber, and not as % recovered fiber plus % postconsumer fiber. Please see www.epa.gov/cpg for additional product specifications and other important information.

CONSTRUCTION PRODUCTS		
Material	% Post Consumer Fiber Content	% Recycled Fiber
Designated: Building insulation rock wool fiberglass cellulose loose-fill or spray-on perlite composite board plastic rigid foam foam in place polyisocyanurate/polyurethane glass fiber reinforced phenolic rigid foam plastic, non-woven batt	75% slag 75% postconsumer paper 23% postconsumer paper	20-25% glass cullet 9% minimum 5% minimum 6% minimum 5% minimum 100% recovered and/or postconsumer plastic
Carpet-polyester face fiber	25 - 100% PET	25 – 100% PET
Carpet cushion bonded polyurethane (old cushion) jute (burlap) synthetic fibers (fabrication scrap) rubber (tire rubber)	15 – 50% 40% 60 – 90%	15 – 50% 40% 100% 60 – 90%
Cement and concrete containing coal fly ash or ground, granulated blast furnace slag	See product listing at www.epa.gov/cpg	
Consolidated latex paint	100%	100%
Reprocessed latex paint white, off-white, pastel colors grey, brown, earthtones, dark colors	20% minimum 50 – 99%	20% minimum 50 – 99%
Floor tiles heavy duty commercial rubber plastic	90 – 100% 90 – 100%	
Laminated paperboard	100%	100%
Patio blocks rubber or rubber blends plastic or plastic blends	90 – 100% 90 – 100%	
Shower and restroom dividers/partitions steel (Basic Oxygen Furnace (BOF) method) steel (Electric Arc Furnace (EAF) method) plastic	16% minimum 67% 20 – 100%	25 – 30% 100% 20 – 100%
Structural fiberboard		80 – 100%
Geotextiles containing recovered materials		
Flowable fill		
Railroad grade crossing surfaces concrete coat rubber steel (BOF method) steel (EAF method)	16% minimum 67%	15 – 20% 85 – 95% 25 – 30% 100%

Other Opportunities:

Low or non-VOC toxic paints
 Water efficient plumbing supplies
 Recovered stone, brick, steel, wood, floor tile, other materials, and fixtures from building deconstruction
 Road building materials with recovered road base, asphalt, and other materials
 Non-fiberglass building insulation with recovered material content such as newspaper or plastic
 Roofing materials with recycled content (ie. plastic)
 Acoustic ceiling tile with recovered mineral wool, plastic, steel mill slag, or other materials
 Plastic lumber with recovered content
 Bricks with recovered fly ash
 Energy efficient windows and doors
 Docks and piers with recovered plastic or wood content
 Floor tiles with recycled content glass
 Sustainably managed wood products
 Natural fabric carpet, carpet tiles, leased carpet, refurbished carpet, 100% reclaimed backing (ie., Collins and Aikman)
 Environmentally safe pressure treated wood

TRANSPORTATION PRODUCTS

Material	% Post Consumer Fiber Content	% Recovered Fiber
Designated: Channelizers plastic rubber (base only)	25 – 95% 100%	
Delineators plastic rubber (base only) steel (BOF method) – base only steel (EAF method) – base only	25 – 90% 100% 16% minimum 67%	25 – 30% 100%
Flexible delineators – plastic	25 – 85%	
Parking stops plastic or rubber concrete containing fly ash concrete containing ground granulated blast furnace slag	100%	20 – 40% 25 – 70%
Traffic barricades plastic (high density polyethylene (HDPE), LDPE, polyethylene tetraphtalate (PET)) steel (BOF method) steel (EAF method) fiberglass	80 – 100% 16% minimum 67%	100% 25 – 30% 100% 100%
Traffic cones (PVC, LDPE, crumb rubber)		50 – 100%
Other Opportunities: Speed bumps made of recovered road material or recovered plastic Signs containing recovered metal or plastic		

VEHICULAR PRODUCTS		
Material	% Post-Consumer Fiber Content	% Recovered Fiber
Designated: Engine coolants (antifreeze)	See product listing at www.epa.gov/cpg	
Re-refined lubricating oils	25 – 100% Can be ordered from Defense Logistics Agency's Defense Supply Center Richmond	
Retread tires	See product listing at www.epa.gov/cpg	
Other Opportunities: Engine hoses with recovered plastic or rubber Rebuilt and reused engines, engine components and other vehicle parts Alternative fuel vehicles Bio-based lubricating oils and greases		

LANDSCAPING PRODUCTS		
Material	% Post Consumer Fiber Content	% Recovered Fiber
Designated: Garden hoses - plastic and/or rubber	60 – 65%	
Soaker hoses – plastic and/or rubber	60 – 70%	
Hydraulic mulch paper based	100%	100%
wood based		100%
Lawn and garden edging - plastic and/or rubber	30 – 100%	30 – 100%
Landscaping timbers and posts HDPE	25 – 100%	75 – 100%
mixed plastic/sawdust	50%	100%
HDPE/fiberglass	75%	95%
other mixed resins	50 – 100%	95 – 100%
Compost (from yard trimmings and/or food waste)	See product listing at www.epa.gov/cpg	
Other Opportunities: Hose reels made of recovered plastic Wheel burrows, gardening and landscaping tools made of recovered wood, plastic, and other materials Hand, electric, or four cycle gasoline lawn and gardening equipment On-site composting products		

PARK AND RECREATION PRODUCTS		
Material	% Post Consumer Fiber Content	% Recovered Fiber
Designated:		
Plastic fencing	60 – 100%	90 – 100%
Playground surfaces - plastic or rubber	90 – 100%	
Running tracks - plastic or rubber	90 – 100%	
Park benches and picnic tables		
plastics	90 – 100%	100%
plastic composites	50 – 100%	100%
aluminum	25%	25%
concrete		15 – 40%
steel (BOF method)	16% minimum	25 – 30%
steel (EAF method)	67%	100%
Playground equipment		
plastics	90 – 100%	100%
plastic composites	50 – 75%	95 – 100%
aluminum	25%	25%
steel (BOF method)	16% minimum	25 – 30%
steel (EAF method)	67%	100%
Other Opportunities:		
Playground equipment and bike racks with recovered plastic, rubber, sawdust, and wood		
Signs and signposts of recovered wood or plastic with recovered content		
Boats with recovered material content		
Four cycle rather than two cycle motors for boats, snowmobiles		

NON-PAPER OFFICE PRODUCTS		
Material	% Post Consumer Fiber Content	% Recovered Fiber
Designated:		
Office recycling containers and waste receptacles		
plastic	20 – 100%	
steel (BOF)	16%	25 – 30%
paper – corrugated	25 – 50%	25 – 50%
paper – solid fiber box	40% minimum	
paper – industrial paperboard	40 – 80%	100%
Plastic desktop accessories		25 – 80% polystyrene
Plastic envelopes	25% minimum	25 – 35%
Plastic trash bags	10 – 100%	
Printer ribbons	Procure printer ribbon re-inking or reloading services or	procure re-inked or reloaded printer ribbons.
Toner cartridges	Procure remanufacturing services for expended cartridges or procure remanufactured toner cartridges or new toner cartridges made with recovered materials.	
Pressboard binders	20% minimum	50% minimum
Paper covered binders	75 – 100%	90 – 100%
Plastic covered binders		25 – 50%
Plastic binders (solid)		
high density polyethylene (HDPE)	90%	90%
polyethylene (PE)	30 – 50%	30 – 50%
polyethylene tetraptalate (PET)	100%	100%
miscellaneous plastics	80%	80%

Plastic clipboards HDPE polystyrene miscellaneous plastics	90% 50% 15%	90% 50% 15 – 80%
Plastic clip portfolios – HDPE	90%	90%
Plastic file folders – HDPE	90%	90%
Plastic presentation folders – HDPE	90%	90%
Other Opportunities: Efficient, duplex capable, properly sized copy machine Energy Star plain paper fax machines Fax modems instead of paper fax machines Pens and pencils with recovered plastic and wood content Erasable and cork boards with recovered plastic and wood Energy Star computer equipment (pursuant to EO 12856) Biodegradable and compostable (cornstarch) trash bags and utensils		

PAPER AND PAPER PRODUCTS		
Material	% Post Consumer Fiber Content	% Recovered Fiber
Designated:		
Copier paper and bond paper	30% minimum	30% minimum
Offset paper	30% minimum	30% minimum
Tablet paper	30% minimum	30% minimum
Forms (computer printout, forms ledger)	30% minimum	30% minimum
Envelope paper, kraft	30% minimum	30% minimum
Envelope paper, white and colored, including manila	10 – 20%	10 – 20%
Envelope paper, unbleached	10% minimum	10% minimum
Cotton fiber paper	30% minimum	30% minimum
Text and cover paper	30% minimum	30% minimum
Supercalendared	10% minimum	10% minimum
Machine finish groundwood	10% minimum	10% minimum
Papeteries	30% minimum	30% minimum
Check safety paper	10% minimum	10% minimum
Bathroom tissue	20 – 60%	20 – 100%
Paper towels	40 – 60%	40 – 100%
Paper napkins	30 – 60%	30 – 100%
Facial tissue	10 – 15%	10 – 100%
General purpose industrial wipers	40% minimum	40 – 100%
Coated printing paper	10% minimum	10% minimum
Carbonless paper	30% minimum	30% minimum
File folders (manila and colored)	30% minimum	30% minimum
Dyed filing products	20% minimum	20 – 50%
Cards (index, postal, other)	20% minimum	50% minimum
Pressboard report covers, binders	20% minimum	20% minimum
Tags and tickets	20% minimum	20 – 50%
Newsprint	20 – 85%	20 – 100%
Corrugated Containers (<300 psi)	25 – 50%	25 – 50%
Corrugated containers (300 psi)	25 – 30%	25 – 30%
Solid fiber boxes	40% minimum	40% minimum
Folding cartons	40 – 80%	100%
Industrial paperboard (tubes, cores, drums, cans)	45 – 100%	100%
Miscellaneous (pad backs, covered binders, book covers, mailing tubes, protective packaging)	75 – 100%	90 – 100%
Padded mailers	5 – 15%	5 – 15%
Carrierboard	10 – 15%	10 – 100%
Brown papers (wrapping paper, bags)	5 – 20%	5 – 40%
Tray liners	50 – 75%	100%

<p>Other Opportunities: Unbleached paper and tissue products and which do not have unnecessary dyes, inks, or fragrances Water based or vegetable/soy-based ink Cardboard with recovered paper content Reusable envelopes, folders, bags, scrap paper Paperless office practices</p>		
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MISCELLANEOUS PRODUCTS/MAINTENANCE SUPPLIES		
Material	% Post Consumer Fiber Content	% Recovered Fiber
<p>Designated: Sorbents (i.e. absorbents and adsorbents used in oil and solvent cleanups and for use as animal bedding) paper textiles plastics wood other organics/multi-materials</p>	<p>90 – 100% 95 – 100%</p>	<p>100% 95 – 100% 25 – 100% 100% 100%</p>
<p>Awards and plaques glass wood paper plastic and plastic/wood composite</p>	<p>75 – 100% 40 – 100% 50 – 100%</p>	<p>100% 100% 40 – 100% 95 – 100%</p>
<p>Industrial drums steel (BOF method) plastic – HDPE fiber drums</p>	<p>16% 30 – 100% 100%</p>	<p>25 – 30% 30 – 100% 100%</p>
<p>Mats rubber plastic rubber/plastic composite</p>	<p>75 – 100% 10 – 100% 100%</p>	<p>85 – 100% 100% 100%</p>
<p>Signs and sign posts/supports plastic signs aluminum signs plastic posts/supports steel posts/supports (BOF method) steel posts/supports (EAF method)</p>	<p>80 – 100% 25% 80 – 100% 16% 67%</p>	<p>80 – 100% 25% 80 – 100% 25 – 30% 100%</p>
<p>Strapping PET polypropylene (PP) steel (BOF method) steel (EAF method)</p>	<p>50 – 85% 16% 67%</p>	<p>50 – 85% 10 – 40% 25 – 30% 100%</p>
<p>Pallets wooden plastic lumber thermoformed paperboard</p>	<p>95 – 100% 100% 25 – 50% 50% minimum</p>	
<p>Other Opportunities: Bubble wrap and other packing materials with recovered plastic content, biodegradable cornstarch “peanuts” Compact fluorescent lighting Non toxic, biodegradable janitorial and equipment cleaners CFC recycling equipment CFC/HCFC free air conditioning and refrigeration equipment Non-halon fire suppression systems Reusable rags and rags with recovered material content Rechargeable batteries, recycle spent batteries</p>		

Websites Referenced Within the User Guide

A-B-C

www.bfrl.nist.gov/oe/bees.html
www.bioproducts-bioenergy.gov
www.BuildingGreen.com
www.buygreen.com
www.certifiedwood.org
www.chlorinefreeproducts.org
www.ci.santa-monica.ca.us/environment/policy/purchasing
www.ci.seattle.wa.us/environment/purchasing.htm
www.conservatree.com
www.coopamerica.org
www.crest.org
www.csinet.org/xp/p-cs/i-current/a-940367539/article.view

D-E-F

www.doep2.org/ap/AP2001_toc.htm
www.doi.gov/pam/chargecard
www.dscr.dla.mil
www.ebuild.com
www.ec.gc.ca/office/html/Default.htm
www.ecomall.com/biz/office.htm
www.EcoPaperAction.org
www.energystar.gov
www.eren.doe.gov/buildings
www.eren.doe.gov/femp
www.eren.doe.gov/femp/financing/escolist.html
www.eren.doe.gov/femp/procurement
www.federal sustainability.org
www.forestethics.org
www.foreststewardship.org
www.fss.gsa.gov/environ
www.ftc.gov/bcp/online/pubs/buspubs/greenguides.pdf

G-H-I-J-K-L

www.gpo.gov
www.gpp.org
www.greenbuilder.com
www.greenbuilding.ca
www.greenpages.org
www.greenseal.org
www.greenspec.com
www.gsa.gov/fss
www.ipmalmanac.com
www.ipminstitute.org
www.iso.ch/iso/en/ISOOnline.frontpage
www.jwod.gov
www.jwod.com

EPA Sites

www.epa.gov
www.epa.gov/cpg
www.epa.gov/cpg/products.htm
www.epa.gov/cpg/products/paper.htm
www.epa.gov/opp/gentt/index.html

EPA Sites (continued)

www.epa.gov/oppt/epp
www.epa.gov/oppt/epp/cleaners/resource.htm
www.epa.gov/oppt/epp/cleaners/select/
www.epa.gov/oppt/epp/database
www.epa.gov/oppt/epp/docback.htm
www.epa.gov/oppt/epp/doccase.htm
www.epa.gov/oppt/epp/pdfs/paint.pdf
www.epa.gov/oppt/epp/pdfs/update7.pdf
www.epa.gov/oppt/epp/ppg
www.epa.gov/oppt/epp/ppg/case/doicase.htm
www.epa.gov/pesticides
www.epa.gov/wastewise

M-N-O

www.metrokc.gov/market/map/index.htm
www.metrokc.gov/procure/green
www.metrokc.gov/procure/green/index.htm
www.moea.state.mn.us/lc/purchasing/index.cfm
www.naco.org/
www.nature.nps.gov/sustainability
www.nerc.org/eppnet.html
www.newdream.org/procure/activities.html
www.nps.gov/dsc/dsgncnstr/susdb/index.htm
www.nps.gov/renew
www.ofee.gov
www.oikos.com
www.pr.doe.gov

P-Q-R-S-T-U

www.papercoalition.org
www.pestworld.org
www.rca-info.org
www.recycledproducts.org
www.reeusda.gov/nipmn
www.rethinkpaper.org
www.scs1.com
www.smartwood.org
www.state.ma.us/osd/enviro/enviro.htm
www.stopwaste.org
www.stopwaste.org/fsbuild.html
www.supply.dla.mil/prodenv.asp
www.sustainable.doe.gov/index.html
www.unicor.gov/index.htm
www.usda.gov/aarc/srbk/index.htm
www.usgbc.org

W-X-Y-Z

www.wbdg.org/index.asp
www.wbdg.org/PrdouctsIntro.asp
www.webcom.com/geos/geos2.html
www.westp2net.org/Janitorial/jp4.htm
www.woodwise.org

Misc.

<http://165.83.71.10/maintenance/directives.htm>
<http://ace.orst.edu/info/nptn/index.html>
<http://edesign.state.fl.us>
<http://greendesign.net/gbrc/>
<http://pfmd.nps.gov/HAZMAT/>
<http://pro-net.sba.gov/cgi-bin/closemesba.pl?TO=http://pro-net.sba.gov/pro-net/greenstuff.html>
[http://pro-net.sba.gov/pro-net/search.html.](http://pro-net.sba.gov/pro-net/search.html)
<http://pub.fss.gsa.gov/environ>
<http://pub.fss.gsa.gov/environ/index.cfm>
<http://smartpay.den.nps.gov>
<http://solstice.crest.org/sustainable/greenclips-info.html>
<http://webteam.nbc.gov/green>

Annual Comprehensive Procurement Guideline (CPG) Reporting Worksheet

Through section 6002 of the Resource Conservation and Recovery Act of 1976 (RCRA), Congress took steps to promote the use of recycled materials by increasing federal use of products containing recovered materials. The Environmental Protection Agency (EPA) was directed to designate products that could be made with recovered content and to recommend practices for their acquisition. Procuring agencies are then required to purchase available products with the highest recovered material content practicable. In support of RCRA, President Clinton issued Executive Order 12873 in 1993 and EO 13101 in 1998 addressing federal acquisition, recycling, and waste prevention. To date, EPA has designated 54 items in the Comprehensive Procurement Guideline (CPG). EPA also issues Recovered Materials Advisory Notices (RMANs) identifying percentages of recovered content. The NPS is required to purchase CPG items with recycled content unless price, performance, or availability dictate otherwise, or unless an environmental attribute other than recycled content is determined to be more important. Written justification (excluding micropurchases) is required for non-CPG, why?").

The purpose of this worksheet is to track CPG items purchased in compliance with RCRA, EO 13101, and the DOI Strategic Plan to implement EO 13101: Greening the Government Through Waste Prevention, Recycling, and Federal Acquisition. RECYCLED CONTENT MINIMUMS: The content levels for all EPA recommendations should be read as % recovered fiber, including % postconsumer fiber, and not as % recovered fiber plus % postconsumer fiber. Post-consumer means a material or product that has served its intended use as a consumer item and has even discarded for disposal or recovery; it is part of the broader category of recovered material. Recovered materials means waste materials and by-products which have been recovered or diverted from solid waste, but does not include those generated from and commonly reused within an original manufacturing process. Please see www.epa.gov/cpg and www.epa.gov/opptintr/epa for product specifications, vendors, guidance, related factsheets, and other important information. You can use Page 8 to record non-CPG, environmentally preferable product purchases (optional).

EPA Designated (CPG) Items

"X" if Used	Product	% Post Consumer Fiber Content	% Recovered Fiber Content	% Recycled Content Received	If item is not CPG, why?	Annual Total Purchased (\$)	Annual Total Recycled Content	Annual Total Purchased (\$) w/o Recycled Content	Quantity (Units)	Source/Contact Information
	Building Insulation									
	rock wool									
	fiberglass (% glass cullet)		20 – 25%							
	cellulose loose-fill or spray-on	75% (slag)								
	perlite composite board	75% (paper)								
	plastic rigid foam	23% (paper)								
	foam in place polyisocyanurate/polyurethane		9% min							
	glass fiber reinforced		5% min							
	phenolic rigid foam		6% min							
	plastic, non-woven batt		5% min							
	(% recovered and/or post-consumer plastic)		100%							
	Carpet-polyester face fiber (% PET)	25 – 100%	25 – 100%							
	Carpet cushion									
	bonded polyurethane (old cushion)	15 – 50%	15 – 50%							
	jute (burlap)	40%	40%							
	synthetic fibers (fabrication scrap)		100%							
	rubber (tire rubber)	60 – 90%	60 – 90%							
Totals:						0	0	0		

Construction Products -- Continued

"X" if Used	Product	% Post Consumer Fiber Content	% Recovered Fiber Content	% Recycled Content Received	If item is not CPG, why?	Annual Total Purchased (\$)	Annual Total Recycled Content	Annual Total Purchased (\$) w/o Recycled Content	Quantity (Units)	Source/Contact Information
	Cement and concrete containing coal fly ash or ground, granulated blast furnace slag	See product listing at www.epa.gov/cpg								
	Consolidated latex paint	100%	100%							
	Reprocessed latex paint									
	white, off-white, pastel colors	20% min	20% min							
	grey, brown, earthtones, dark colors	50 – 99%	50 – 99%							
	Floor tiles heavy duty commercial	90 – 100%								
	rubber	90 – 100%								
	plastic	100%	100%							
	Laminated paperboard				1					

"X" if Used	Product	% Post Consumer Fiber Content	% Recovered Fiber Content	% Recycled Content Received	If item is not CPG, why?	Annual Total Purchased (\$ with Recycled Content)	Annual Total Purchased (\$ w/o Recycled Content)	Quantity (Units)	Source/Contact Information
	Patio blocks								
	rubber or rubber blends	90 – 100%							
	plastic or plastic blends	90 – 100%							
	Shower and restroom dividers/partitions								
	steel (Basic Oxygen Furnace (BOF) method)	16% min	25 – 30%						
	steel (Electric Arc Furnace (EAF) method)	67%	100%						
	plastic	20 – 100%	80 – 100%						
	Structural fiberboard								
	Geotextiles containing recovered materials								
	Flowable fill								
	Railroad grade crossing surfaces								
	concrete coat		15 – 20%						
	rubber		85 – 95%						
	steel (BOF method)	16% min	25 – 30%						
	steel (EAF method)	67%	100%						
Totals:						0	0	0	

Vehicular Products

"X" if Used	Product	% Post Consumer Fiber Content	% Recovered Fiber Content	% Recycled Content Received	If item is not CPG, why?	Annual Total Purchased (\$ with Recycled Content)	Annual Total Purchased (\$ w/o Recycled Content)	Quantity (Units)	Source/Contact Information
	Engine coolants (antifreeze)		See product listing at www.epa.gov/cpg						
	Re-refined lubricating oils	25 – 100%	See listing at www.dscr.dla.mil						
	Retread tires		See product listing at www.epa.gov/cpg						
Totals:						0	0	0	

Transportation Products

"X" if Used	Product	% Post Consumer Fiber Content	% Recovered Fiber Content	% Recycled Content Received	If item is not CPG, why?	Annual Total Purchased (\$ with Recycled Content)	Annual Total Purchased (\$ w/o Recycled Content)	Quantity (Units)	Source/Contact Information
	Channelizers								
	plastic	25 – 95%							
	rubber (base only)	100%							
	Delineators								
	plastic	25 – 90%							
	rubber (base only)	100%							
	steel (BOF method) – base only	16% min	25 – 30%						
	steel (EAF method) – base only	67%	100%						
	Flexible delineators – plastic	25 – 85%							
	Parking stops								
	plastic or rubber	100%							
	concrete containing fly ash		20 – 40%						
	concrete containing ground granulated blast furnace slag		25 – 70%						
	Traffic barricades								
	plastic (high density polyethylene (HDPE), LDPE, polyethylene terephthalate (PET))	80 – 100%	100%						
	steel (BOF method)	16% min	25 – 30%						
	steel (EAF method)	67%	100%						
	fiberglass		100%						

Traffic cones (PVC, LDPE, crumb rubber)		50 – 100%	Totals:			0	0	0	
Landscaping Products									
"X" if Used	Product	% Post Consumer Fiber Content	% Recovered Fiber Content	% Recycled Content Received	If item is not CPG, why?	Annual Total Purchased (\$) with Recycled Content	Annual Total Purchased (\$) w/o Recycled Content	Quantity (Units)	Source/Contact Information
	Garden hoses - plastic and/or rubber	60 – 65%							
	Soaker hoses – plastic and/or rubber	60 – 70%							
	Hydraulic mulch								
	paper based	100%	100%						
	wood based		100%						
	Lawn and garden edging - plastic and/or rubber	30 – 100%	30 – 100%						
	Landscaping timbers and posts								
	HDPE	25 – 100%	75 – 100%						
	mixed plastic/sawdust	50%	100%						
	HDPE/fiberglass	75%	95%						
	other mixed resins	50 – 100%	95 – 100%						
	Compost (from yard trimmings and/or food waste)	See www.epa.gov/cpg							
						Totals:	0	0	

Park and Recreation Products									
"X" if Used	Product	% Post Consumer Fiber Content	% Recovered Fiber Content	% Recycled Content Received	If item is not CPG, why?	Annual Total Purchased (\$) with Recycled Content	Annual Total Purchased (\$) w/o Recycled Content	Quantity (Units)	Source/Contact Information
	Plastic fencing	60 – 100%	90 – 100%						
	Playground surfaces - plastic or rubber	90 – 100%							
	Running tracks - plastic or rubber	90 – 100%							
	Park benches and picnic tables								
	plastics	90 – 100%	100%						
	plastic composites	50 – 100%	100%						
	aluminum	25%	25%						
	concrete	15 – 40%							
	steel (BOF method)	16% min	25 – 30%						
	steel (EAF method)	67%	100%						
	Playground equipment								
	plastics	90 – 100%	100%						
	plastic composites	50 – 75%	95 – 100%						
	aluminum	25%	25%						
	steel (BOF method)	16% min	25 – 30%						
	steel (EAF method)	67%	100%						
						Totals:	0	0	

Miscellaneous Products/Maintenance Supplies									
"X" if Used	Product	% Post Consumer Fiber Content	% Recovered Fiber Content	% Recycled Content Received	If item is not CPG, why?	Annual Total Purchased (\$) with Recycled Content	Annual Total Purchased (\$) w/o Recycled Content	Quantity (Units)	Source/Contact Information
	Sorbents (i.e. absorbents and adsorbents used in oil and solvent clean-ups and for use as animal bedding)								
	paper	90 – 100%	100%						
	textiles	95 – 100%	95 – 100%						
	plastics		25 – 100%						
						Totals:	0	0	

INDIVIDUAL ACQUISITION PLAN AND RATIONALE DOCUMENT

PROJECTS OF \$25,000 OR GREATER

IAP Number: _____ PMIS# _____
Park/Office _____ Purchase Request #: _____
Project Manager _____
Date prepared _____ Telephone no. _____
Project description _____

Commodity: Supply _____ Service _____ Construction _____ NAICS _____
Independent government cost estimate: \$ _____
Funding source: Cyclic maint _____ Base _____ Equipment Replacement _____
Repair/Rehab _____ Other _____
Account no(s) _____
Proposed acquisition method: IFB _____ RFP _____ Other _____ Contract type: _____
Specifications prepared by _____ Proposed COR _____
Specifications due in Contracting _____ Proposed award Date _____
Clearances required: Over \$300,000 _____ ADP services/equip. _____
Will sustainable practices/products be incorporated into the spec? If no, explain) Yes _____ No _____
Explanation _____
Has all NEPA Compliance been approved? Yes _____ No _____
Has all required 106 compliance been approved? Yes _____ No _____
Special considerations _____
Submitted by Project Mgr _____ Date _____
Recommended by Supt./Program Coordinator _____ Date _____
Budget Official/Supt. _____ Date _____
Program Manager Comments Regarding use of the Business Utilization Development Program(8[a]; HubZone) _____

BUSINESS UTILIZATION DEVELOPMENT SPECIALIST (BUDS) RECOMMENDATION

Small Business Administration HubZone Setaside..... Small Business Setaside.....
Small Business Administration 8(a) Setaside..... Full & Open Competition.....
Comments: _____

BUDS signature _____ Date _____

ACCEPTANCE BY PROCUREMENT OFFICIAL

Contracting Officer assigned _____
Team Leader, Contracting, PGSO _____ Date _____

**FEDERAL PROCUREMENT DATA SYSTEM (FPDS)
INDIVIDUAL CONTRACT ACTION REPORT (ICAR)**

1443	1.	REPORTING AGENCY (FIPS 95)
	2.	CONTRACT NUMBER
	3.	MODIFICATION NUMBER
	4.	CONTRACTING OFFICE ORDER NUMBER
	5.	CONTRACTING OFFICE CODE
000000	6.	ACTION DATE (YYYYMM)
	7.	TYPE OF DATA ENTRY A. Original, B. Deleting, C. Correcting
0000	8.	REPORT PERIOD (YYYYQ)
	9.	KIND OF CONTRACT ACTION A. Initial Letter Contract, B. Definitive Contract Superseding Letter, C. New Definitive Contract, D. Purchase Orders/BPA Calls Using Simplified Acquisition Procedures, E. Order Under Single Award Indefinite Delivery Contract, F. Order Under BOA, G. Order/Modification Under Federal Schedule Contract, H. Modification, J. Termination for Default, K. Termination for Convenience, L. Order Under Multiple Award Contract, Z. Initial Load of Federal Schedule Contract
00000300	10.	DOLLARS OBLIGATED OR DEOBLIGATED THIS ACTION (NEAREST \$)
A	11.	TYPE OF OBLIGATION A. Obligated, B. Deobligated
	12.	PRINCIPAL PRODUCT OR SERVICE CODE
	13.	PRINCIPAL NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM
	14.	COMMERCIAL ITEM ACQUISITION PROCEDURES Y - Yes, N - No
	15.	CONTRACTOR NAME
	16.	CONTRACTOR IDENTIFICATION NUMBER (DUNS)
	17A.	PRINCIPAL PLACE OF PERFORMANCE (FIPS 55) State City
	17B.	FOREIGN COUNTRY (FIPS 10)
	18.	CONTRACT FOR FOREIGN GOVT. OR INTERNATIONAL ORGANIZATION Y - Yes, N - No
	19A.	USE OF EPA DESIGNATED PRODUCTS A. EPA-designated products or products were purchased and all contained the required minimum recovered material content, B. EPA-designated product or products were purchased without the required minimum recovered material content and a justification was completed based on inability to acquire the product(s) competitively within a reasonable time, C. EPA-designated product or products were purchased without the required minimum recovered material content and a justification was completed based on inability to acquire product(s) at a reasonable price, D. EPA-designated product or products were purchased without the required minimum recovered material content and a justification was completed based on inability to acquire the product(s) to reasonable performance standards in the specifications, E. No EPA-designated product(s) were required.
	19B.	USE OF RECOVERED MATERIAL AND WASTE REDUCTION CLAUSES A. Recovered Material and Waste Reduction Clauses, B. No Clauses Included
	20.	PERFORMANCE-BASED SERVICE CONTRACTING (PBSC) Y - Yes, N - No
	21.	BUNDLING OF CONTRACT REQUIREMENTS Y - Yes, N - No
	22.	COUNTRY OF MANUFACTURE (FIPS 10)
	23.	SYNOPSIS OF THIS PROCUREMENT PRIOR TO AWARD A. Synopsized Prior to Award, B. Not Synopsized Due to Urgency, C. Not Synopsized for Other Reasons, D. Not Synopsized Under the SBA/OFPP Waiver Pilot

**FEDERAL PROCUREMENT DATA SYSTEM (FPDS)
INDIVIDUAL CONTRACT ACTION REPORT (ICAR) (Cont'd)**

	24.	TYPE OF CONTRACT OR MODIFICATION A. Fixed-Price Redetermination, J. Fixed-Price, K. Fixed-Price with Economic Price Adjustment, L. Fixed-Price Incentive, R. Cost Plus Award Fee, S. Cost - No Fee, T. Cost Sharing, U. Cost Plus Fixed Fee, V. Cost Plus Incentive, Y. Time and Materials, Z. Labor Hours
	25.	CICA APPLICABILITY A. CICA Applicable, B. Purchase Orders/BPA Calls Using Simplified Acquisition Procedures, C. Subject to Statute Other Than CICA, D. Pre-CICA, E. Commercial Item Acquisition Procedures Under Test Program
	26.	SOLICITATION PROCEDURES (Complete only if Item 25 = A) A. Full and Open Competition - Sealed Bid, B. Full and Open Competition - Competitive Proposal, C. Full and Open Competition - Combination, D. Architect - Engineer Procedures, E. Basic Research, F. Multiple Award Schedule, G. Alternative Sources, H. Reserved, J. Reserved, K. Set-Aside, L. Other Than Full and Open Competition
	27.	AUTHORITY FOR OTHER THAN FULL AND OPEN COMPETITION (Complete only if item 26 = L) A. Unique Source, B. Follow-on Contract, C. Unsolicited Research Proposal, D. Patent/Data Rights, E. Utilities, F. Standardization, G. Only One Source - Other, H. Urgency, J. Mobilization, Essential R&D Capability or Expert Services, K. Reserved, L. International Agreement, M. Authorized by Statute, N. Authorized for Resale, P. National Security, Q. Public Interest
	28.	NUMBER OF OFFERS RECEIVED (Complete only if Item 25 = A or E) A. 1, B. 2-5, C. 6-10, D. 11-15, E. 16-20, F. 21-50, G. Over 50
	29.	EXTENT COMPETED A. Competed Action, B. Not Available for Competition, C. Follow-on to Contract Action, D. Not Competed
G	30.	TYPE OF CONTRACTOR A. Small Disadvantaged Business, B. Other Small Business, C. Large Business, D. JWOD Nonprofit Agency, E. Educational Institution, F. Hospital, G. Nonprofit Organization, H. Reserved, J. Reserved, K. State/Local Government, L. Foreign Contractor, M. Domestic Contractor Performing Outside US, U. Historically Black College/University or Minority Institution (HBCU/MI)
	31.	WOMEN-OWNED BUSINESS Y - Yes, N - No
	32.	HUBZONE SMALL BUSINESS CONCERN Y - Yes, N - No
	33A.	HUBZONE PROGRAM A. HUBZone Sole Source, B. HUBZone Set-Aside, C. HUBZone Price Evaluation Preference, D. Combined HUBZone Preference/Small Disadvantaged Business Price Adjustment, E. Not Applicable
	33B.	SMALL DISADVANTAGED BUSINESS PROGRAM A. 8(a) Contract Award, B. 8(a) with HUBZone Priority, C. SDB Set-Aside, D. SDB Price Evaluation Adjustment, E. SDB Participation Program, F. Not Applicable
	33C.	OTHER PREFERENCE PROGRAMS A. Directed to JWOD Nonprofit Agency, B. Small Business Set-Aside, C. Buy Indian, D. No Preference/Not Listed, E. Very Small Business Set-Aside
	33D.	HUBZONE PRICE EVALUATION PREFERENCE PERCENT DIFFERENCE
	33E.	SDB PRICE EVALUATION ADJUSTMENT PERCENT DIFFERENCE
	34.	SUBCONTRACTING PLAN (Small, Small Disadvantaged, and Women-Owned Small Business) A - Required, B - Not Required
	35.	SUBJECT TO LABOR STATUTES A. Walsh-Healey Act, B. Reserved, C. Service Contract Act, D. Davis-Bacon Act, E. Not Subject to Walsh-Healey, Service Contract, or Davis-Bacon Acts
	36.	ESTIMATED CONTRACT COMPLETION DATE (YYYYMM)
	37.	CONTRACTOR'S TIN
	38.	COMMON PARENT'S NAME

**FEDERAL PROCUREMENT DATA SYSTEM (FPDS)
INDIVIDUAL CONTRACT ACTION REPORT (ICAR) (Cont'd)**

	39.	COMMON PARENT'S TIN
	40.	VETERAN-OWNED SMALL BUSINESS (VOSB) A. Service Disabled Veteran Owned Small Business, B. Other Veteran Owned Small Business, C. Not Veteran Owned Small Business
	41.	MULTIPLE AWARD CONTRACT FAIR OPPORTUNITY A. Fair Opportunity Process, B. Urgency, C. One/Unique Source, D. Follow on Contract, E. Minimum Guarantee
		SMALL BUSINESS COMPETITIVENESS DEMONSTRATION PROGRAM (Applicable to AGR, DOD, DOE, DOI, DOT, EPA, GSA, HHS, NASA, and VA)
	42.	DEMONSTRATION PROGRAM Y - Yes, N - No
	43.	EMERGING SMALL BUSINESS Y - Yes, N - No
	44.	EMERGING SMALL BUSINESS RESERVE AWARD Y - Yes, N - No
	45.	SIZE OF SMALL BUSINESS Number of Employees A. 50 or less, B. 51 - 100, C. 101 - 250, D. 251 - 500, E. 501 - 750, F. 751 - 1,000, G. Over 1,000 OR Average Annual Gross Revenue M. \$1,000,000 or less, N. \$1,000,001 - \$2,000,000, P. \$2,000,001 - \$3,500,000, R. \$3,500,001 - \$5,000,000, S. \$5,000,001 - \$10,000,000, T. \$10,000,001 - \$17,000,000, Z. Over \$17,000,000
	46A.	FUNDING AGENCY
	46B.	FUNDING AGENCY - DODAAC
	46C.	FUNDING AGENCY - COMMERCIAL ITEM CATEGORY A. Commercially Available Off-The-Shelf Item, B. Other Commercial Item, C. Nondevelopmental Item, D. Noncommercial Item, E. Commercial Service, F. NonCommercial Service.
	46D.	FUNDING AGENCY - REASON FOR PURCHASE A. Convenience and Economy, B. Expertise, C. Specifically Authorized, D. Authorized by Executive Order, E. Modification or Extension, F. Other
	46E.	FUNDING AGENCY - CLINGER-COHEN ACT Y - Yes, N - No
	47.	OPTIONAL REPORTED DATA ELEMENTS

FAC 2001-02 FEBRUARY 19, 2002

PART 23—ENVIRONMENT, ENERGY AND WATER EFFICIENCY, RENEWABLE ENERGY TECHNOLOGIES, OCCUPATIONAL SAFETY, AND DRUG-FREE WORKPLACE

<i>Sec.</i>	<i>Scope.</i>		
23.000	Scope.		
Subpart 23.1—[Reserved]			
Subpart 23.2—Energy and Water Efficiency and Renewable Energy			
23.200	Scope.		
23.201	Authorities.		
23.202	Policy.		
23.203	Energy-efficient products.		
23.204	Energy-savings performance contracts.		
Subpart 23.3—Hazardous Material Identification and Material Safety Data			
23.300	Scope of subpart.		
23.301	Definition.		
23.302	Policy.		
23.303	Contract clause.		
Subpart 23.4—Use of Recovered Materials			
23.400	Scope of subpart.		
23.401	Definition.		
23.402	Authorities.		
23.403	Policy.		
23.404	Agency affirmative procurement programs.		
23.405	Procedures.		
23.406	Solicitation provision and contract clause.		
Subpart 23.5—Drug-Free Workplace			
23.500	Scope of subpart.		
23.501	Applicability.		
23.502	Authority.		
23.503	Definitions.		
23.504	Policy.		
23.505	Contract clause.		
23.506	Suspension of payments, termination of contract, and debarment and suspension actions.		
Subpart 23.6—Notice of Radioactive Material			
23.601	Requirements.		
23.602	Contract clause.		
Subpart 23.7—Contracting for Environmentally Preferable Products and Services			
23.700	Scope.		
23.701	Definition.		
23.702	Authorities.		
23.703	Policy.		
23.704	Application to Government-owned or -leased facilities.		
23.705	Contract clause.		
Subpart 23.8—Ozone-Depleting Substances			
23.800	Scope of subpart.		
23.801	Authorities.		
23.802	[Reserved]		
23.803	Policy.		
23.804	Contract clauses.		
Subpart 23.9—Toxic Chemical Release Reporting			
23.901	Purpose.		
23.902	General.		
23.903	Applicability.		
23.904	Definition.		
23.905	Policy.		
23.906	Requirements.		
23.907	Solicitation provision and contract clause.		
Subpart 23.10—Federal Compliance with Right-to-Know Laws and Pollution Prevention Requirements			
23.1001	Purpose.		
23.1002	Applicability.		
23.1003	Definition.		
23.1004	Requirements.		
23.1005	Contract clause.		

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Subpart 23.2—Energy and Water Efficiency and Renewable Energy

23.200 Scope.

(a) This subpart prescribes policies and procedures for—

(1) Acquiring energy- and water-efficient products and services, and products that use renewable energy technology; and

(2) Using an energy-savings performance contract to obtain energy-efficient technologies at Government facilities without Government capital expense.

(b) This subpart applies to acquisitions in the United States, its possessions and territories, Puerto Rico, and the Northern Mariana Islands. Agencies conducting acquisitions outside of these areas must use their best efforts to comply with this subpart.

23.201 Authorities.

(a) Energy Policy and Conservation Act (42 U.S.C. 6361(a)(1)) and Resource Conservation and Recovery Act of 1976 (42 U.S.C. 6901, *et seq.*).

(b) National Energy Conservation Policy Act (42 U.S.C. 8253, 8262g, and 8287).

(c) Executive Order 11912 of April 13, 1976, Delegations of Authority under the Energy Policy and Conservation Act.

(d) Executive Order 13123 of June 3, 1999, Greening the Government through Efficient Energy Management.

23.202 Policy.

The Government's policy is to acquire supplies and services that promote energy and water efficiency, advance the use of renewable energy products, and help foster markets for emerging technologies. This policy extends to all acquisitions, including those below the simplified acquisition threshold.

23.203 Energy-efficient products.

(a) If life-cycle cost-effective and available—

(1) When acquiring energy-using products, contracting officers must purchase ENERGY STAR® or other energy-efficient products designated by the Department of Energy's Federal Energy Management Program (FEMP); or

(2) When contracting for services that will include the provision of energy-using products, including contracts for design, construction, renovation, or maintenance of a public building, the specifications must require that the contractor provide ENERGY STAR or other energy-efficient products.

(b) Information is available via the Internet on—

(1) ENERGY STAR® at <http://www.energystar.gov/>; and

(2) FEMP at <http://www.eren.doe.gov/femp/procurement>.

23.204 Energy-savings performance contracts.

(a) Section 403 of Executive Order 13123 of June 3, 1999, Greening the Government through Efficient Energy Management, requires an agency to make maximum use of the authority provided in the National Energy Conservation Policy Act (42 U.S.C. 8287) to use an energy-savings performance contract (ESPC), when life-cycle cost-effective, to reduce energy use and cost in the agency's facilities and operations.

(b)(1) Under an ESPC, an agency can contract with an energy service company for a period not to exceed 25 years to improve energy efficiency in one or more agency facilities at no direct capital cost to the United States Treasury. The energy service company finances the capital costs of implementing energy conservation measures and receives, in return, a contractually determined share of the cost savings that result.

(2) Except as provided in 10 CFR 436.34, ESPC's are subject to Subpart 17.1.

(c) To solicit and award an ESPC, the contracting officer—

(1) Must use the procedures, selection method, and terms and conditions provided in 10 CFR part 436, Subpart B; at <http://www.eren.doe.gov/femp/resources/legislation.html>; and

(2) May use the "Qualified List" of energy service companies established by the Department of Energy and other agencies.

Subpart 23.3—Hazardous Material Identification and Material Safety Data

23.300 Scope of subpart.

This subpart prescribes policies and procedures for acquiring deliverable items, other than ammunition and explosives, that require the furnishing of data involving hazardous materials. Agencies may prescribe special procedures for ammunition and explosives.

23.301 Definition.

"Hazardous material" is defined in the latest version of Federal Standard No. 313 (Federal Standards are sold to the public and Federal agencies through—

General Services Administration
Specifications Unit (3FBP-W)
7th & D Sts. SW
Washington, DC 20407.

23.302 Policy.

(a) The Occupational Safety and Health Administration (OSHA) is responsible for issuing and administering regulations that require Government activities to apprise their employees of—

- (1) All hazards to which they may be exposed;
- (2) Relative symptoms and appropriate emergency treatment; and
- (3) Proper conditions and precautions for safe use and exposure.

(b) To accomplish this objective, it is necessary to obtain certain information relative to the hazards which may be introduced into the workplace by the supplies being acquired. Accordingly, offerors and contractors are required to submit

hazardous materials data whenever the supplies being acquired are identified as hazardous materials. The latest version of Federal Standard No. 313 (Material Safety Data Sheet, Preparation and Submission of) includes criteria for identification of hazardous materials.

(c) Hazardous material data (Material Safety Data Sheets (MSDS)) are required—

(1) As specified in the latest version of Federal Standard No. 313 (including revisions adopted during the term of the contract);

(2) For any other material designated by a Government technical representative as potentially hazardous and requiring safety controls.

(d) MSDS's must be submitted—

(1) By the apparent successful offeror prior to contract award if hazardous materials are expected to be used during contract performance.

(2) For agencies other than the Department of Defense, again by the contractor with the supplies at the time of delivery.

(e) The contracting officer shall provide a copy of all MSDS's received to the safety officer or other designated individual.

23.303 Contract clause.

(a) The contracting officer shall insert the clause at 52.223-3, Hazardous Material Identification and Material Safety Data, in solicitations and contracts if the contract will require the delivery of hazardous materials as defined in 23.301.

(b) If the contract is awarded by an agency other than the Department of Defense, the contracting officer shall use the clause at 52.223-3 with its Alternate I.

Subpart 23.4—Use of Recovered Materials

23.400 Scope of subpart.

This subpart prescribes policies and procedures for acquiring Environmental Protection Agency (EPA)-designated products through affirmative procurement programs required by the Resource Conservation and Recovery Act of 1976 (RCRA) (42 U.S.C. 6962) and Executive Order 13101 of September 14, 1998, Greening the Government through Waste Prevention, Recycling, and Federal Acquisition.

23.401 Definition.

“EPA-designated product,” as used in this subpart, means a product—

- (1) That is or can be made with recovered material;
- (2) That is listed by EPA in a procurement guideline (40 CFR part 247); and
- (3) For which EPA has provided purchasing recommendations in a related Recovered Materials Advisory Notice (RMAN).

23.402 Authorities.

(a) The Resource Conservation and Recovery Act of 1976 (RCRA), 42 U.S.C. 6962, requires agencies responsible for drafting or reviewing specifications used in agency acquisitions to—

- (1) Eliminate from those specifications any requirement excluding the use of recovered materials or requiring products to be manufactured from virgin materials; and
- (2) Require, for EPA-designated products, using recovered materials to the maximum extent practicable without jeopardizing the intended end use of the item.

(b) RCRA also requires—

- (1) EPA to prepare guidelines on the availability, sources, and potential uses of recovered materials and associated products, including solid waste management services; and
- (2) Agencies to develop and implement affirmative procurement programs for EPA-designated products within 1 year after EPA's designation.

(c) Executive Order 13101 requires that the agency head—

- (1) Work to increase and expand markets for recovered materials through greater Government preference and demand for such products consistent with the demands of efficiency and cost-effectiveness; and
- (2) Develop and implement affirmative procurement programs in accordance with direction in RCRA and the Executive order.

(c) Executive Order 13101 requires that the agency head—

23.403 Policy.

Government policy on the use of recovered materials considers cost, availability of competition, and performance. The objective is to acquire competitively, in a cost-effective man-

ner, products that meet reasonable performance requirements and that are composed of the highest percentage of recovered materials practicable.

23.404 Agency affirmative procurement programs.

(a) For EPA-designated products, an agency must establish an affirmative procurement program, if the agency's purchases meet the threshold in 23.405(a). Technical or requirements personnel and procurement personnel are responsible for the preparation, implementation, and monitoring of affirmative procurement programs. Agency affirmative procurement programs must include—

- (1) A recovered materials preference program;
- (2) An agency promotion program;
- (3) A program for requiring reasonable estimates, certification, and verification of recovered material used in the performance of contracts; and
- (4) Annual review and monitoring of the effectiveness of the program.

(b) Agency affirmative procurement programs must require that 100 percent of purchases of EPA-designated products contain recovered material, unless the item cannot be acquired—

- (1) Competitively within a reasonable time frame;
- (2) Meeting appropriate performance standards; or
- (3) At a reasonable price.

(c) Agency affirmative procurement programs must provide guidance for purchases of EPA-designated products at or below the micro-purchase threshold.

23.405 Procedures.

(a) These procedures apply to all agency acquisitions of EPA-designated products, including micro-purchases, if—

- (1) The price of the product exceeds \$10,000; or
- (2) The aggregate amount paid for products, or for functionally equivalent products, in the preceding fiscal year was \$10,000 or more. RCRA requires that an agency include micro-purchases in determining if the aggregate amount paid was \$10,000 or more. However, it is not recommended that an agency track micro-purchases unless it intends to claim an exemption from the requirement to establish an affirmative procurement program in the following fiscal year.

(b) Contracting officers should refer to EPA's list of EPA-designated products (available via the Internet at <http://www.epa.gov/cpg/>) and to their agencies' affirmative procurement programs when purchasing supplies that contain recovered material or services that could include supplies that contain recovered material.

(c) The contracting officer must place in the contract file a written justification if an acquisition of EPA-designated products above the micro-purchase threshold does not contain recovered material. If the agency has designated an Environmental Executive, the contracting officer must give a copy of

the written justification to that official. The contracting officer must base the justification on the inability to acquire the product—

- (1) Competitively within a reasonable period of time;
- (2) At reasonable prices; or
- (3) To reasonable performance standards in the specifications, provided a written determination by technical or requirements personnel of the performance standard's reasonableness is included with the justification. The technical and requirements personnel must base their determination on National Institute of Standards and Technology guidelines, if available.
- (d) Agencies must establish procedures for consolidating and reporting contractor estimates required by the clause at

52.223-9, Estimate of Percentage of Recovered Material Content for EPA-Designated Products.

23.406 Solicitation provision and contract clause.

(a) Insert the provision at 52.223-4, Recovered Material Certification, in solicitations that are for, or specify the use of, recovered materials.

(b) Insert the clause at 52.223-9, Estimate of Percentage of Recovered Material Content for EPA-Designated Products, in solicitations and contracts exceeding \$100,000 that include the provision at 52.223-4. If technical personnel advise that estimates can be verified, use the clause with its Alternate I.

Subpart 23.5—Drug-Free Workplace

23.500 Scope of subpart.

This subpart implements the Drug-Free Workplace Act of 1988 (Pub. L. 100-690).

23.501 Applicability.

This subpart applies to all contracts including contracts with 8(a) contractors under FAR Subpart 19.8 and modifications which require a justification and approval (see Subpart 6.3) except—

(a) Contracts at or below the simplified acquisition threshold; however, the requirements of this subpart shall apply to contracts of any value if the contract is awarded to an individual;

(b) Contracts for the acquisition of commercial items (see Part 12);

(c) Contracts or those parts of contracts that are to be performed outside of the United States, its territories, and its possessions;

(d) Contracts by law enforcement agencies, if the head of the law enforcement agency or designee involved determines that application of this subpart would be inappropriate in connection with the law enforcement agency's undercover operations; or

(e) Where application would be inconsistent with the international obligations of the United States or with the laws and regulations of a foreign country.

23.502 Authority.

Drug-Free Workplace Act of 1988 (Pub. L. 100-690).

23.503 Definitions.

As used in this subpart—

“Controlled substance” means a controlled substance in schedules I through V of section 202 of the Controlled Substances Act (21 U.S.C. 812), and as further defined in regulation at 21 CFR 1308.11—1308.15.

“Conviction” means a finding of guilt (including a plea of nolo contendere) or imposition of sentence, or both, by any judicial body charged with the responsibility to determine violations of the Federal or State criminal drug statutes.

“Criminal drug statute” means a Federal or non-Federal criminal statute involving the manufacture, distribution, dispensing, possession, or use of any controlled substance.

“Employee” means an employee of a contractor directly engaged in the performance of work under a Government contract. “Directly engaged” is defined to include all direct cost employees and any other contract employee who has other than a minimal impact or involvement in contract performance.

“Individual” means an offeror/contractor that has no more than one employee including the offeror/contractor.

23.504 Policy.

(a) No offeror other than an individual shall be considered a responsible source (see 9.104-1(g) and 19.602-1(a)(2)(i)) for a contract that exceeds the simplified acquisition threshold, unless it agrees that it will provide a drug-free workplace by—

(1) Publishing a statement notifying its employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the contractor's workplace, and specifying the actions that will be taken against employees for violations of such prohibition;

(2) Establishing an ongoing drug-free awareness program to inform its employees about—

(i) The dangers of drug abuse in the workplace;

(ii) The contractor's policy of maintaining a drug-free workplace;

(iii) Any available drug counseling, rehabilitation, and employee assistance programs; and

(iv) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;

(3) Providing all employees engaged in performance of the contract with a copy of the statement required by paragraph (a)(1) of this section;

(4) Notifying all employees in writing in the statement required by paragraph (a)(1) of this section, that as a condition of employment on a covered contract, the employee will—

(i) Abide by the terms of the statement; and

(ii) Notify the employer in writing of the employee's conviction under a criminal drug statute for a violation occurring in the workplace no later than 5 days after such conviction;

(5) Notifying the contracting officer in writing within 10 days after receiving notice under subdivision (a)(4)(ii) of this section, from an employee or otherwise receiving actual notice of such conviction. The notice shall include the position title of the employee;

(6) Within 30 days after receiving notice under paragraph (a)(4) of this section of a conviction, taking one of the following actions with respect to any employee who is convicted of a drug abuse violation occurring in the workplace:

(i) Taking appropriate personnel action against such employee, up to and including termination; or

(ii) Requiring such employee to satisfactorily participate in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency.

(7) Making a good faith effort to maintain a drug-free workplace through implementation of paragraphs (a)(1) through (a)(6) of this section.

(b) No individual shall be awarded a contract of any dollar value unless that individual agrees not to engage in the unlaw-

ful manufacture, distribution, dispensing, possession, or use of a controlled substance while performing the contract.

(c) For a contract of 30 days or more performance duration, the contractor shall comply with the provisions of paragraph (a) of this section within 30 days after contract award, unless the contracting officer agrees in writing that circumstances warrant a longer period of time to comply. Before granting such an extension, the contracting officer shall consider such factors as the number of contractor employees at the worksite, whether the contractor has or must develop a drug-free workplace program, and the number of contractor worksites. For contracts of less than 30 days performance duration, the contractor shall comply with the provisions of paragraph (a) of this section as soon as possible, but in any case, by a date prior to when performance is expected to be completed.

23.505 Contract clause.

(a) Contracting officers shall insert the clause at 52.223-6, Drug-Free Workplace, except as provided in paragraph (b) of this section, in solicitations and contracts—

(1) Of any dollar value if the contract is expected to be awarded to an individual; or

(2) Expected to exceed the simplified acquisition threshold if the contract is expected to be awarded to other than an individual.

(b) Contracting officers shall not insert the clause at 52.223-6, Drug-Free Workplace, in solicitations and contracts, if—

(1) The resultant contract is to be performed entirely outside of the United States, its territories, and its possessions;

(2) The resultant contract is for law enforcement agencies, and the head of the law enforcement agency or designee involved determines that application of the requirements of this subpart would be inappropriate in connection with the law enforcement agency's undercover operations; or

(3) Inclusion of these requirements would be inconsistent with the international obligations of the United States or with the laws and regulations of a foreign country.

23.506 Suspension of payments, termination of contract, and debarment and suspension actions.

(a) After determining in writing that adequate evidence to suspect any of the causes at paragraph (d) of this section exists, the contracting officer may suspend contract payments in accordance with the procedures at 32.503-6(a)(1).

(b) After determining in writing that any of the causes at paragraph (d) of this section exist, the contracting officer may terminate the contract for default.

(c) Upon initiating action under paragraph (a) or (b) of this section, the contracting officer shall refer the case to the agency suspension and debarment official, in accordance with agency procedures, pursuant to Subpart 9.4.

(d) The specific causes for suspension of contract payments, termination of a contract for default, or suspension and debarment are—

(1) The contractor has failed to comply with the requirements of the clause at 52.223-6, Drug-Free Workplace; or

(2) The number of contractor employees convicted of violations of criminal drug statutes occurring in the workplace indicates that the contractor has failed to make a good faith effort to provide a drug-free workplace.

(e) A determination under this section to suspend contract payments, terminate a contract for default, or debar or suspend a contractor may be waived by the agency head for a particular contract, in accordance with agency procedures, only if such waiver is necessary to prevent a severe disruption of the agency operation to the detriment of the Federal Government or the general public (see Subpart 9.4). The waiver authority of the agency head cannot be delegated.

Subpart 23.6—Notice of Radioactive Material**23.601 Requirements.**

(a) The clause at 52.223-7, Notice of Radioactive Materials, requires the contractor to notify the contracting officer prior to delivery of radioactive material.

(b) Upon receipt of the notice, the contracting officer shall notify receiving activities so that appropriate safeguards can be taken.

(c) The clause permits the contracting officer to waive the notification if the contractor states that the notification on prior deliveries is still current. The contracting officer may waive the notice only after consultation with cognizant technical representatives.

(d) The contracting officer is required to specify in the clause at 52.223-7, the number of days in advance of delivery that the contractor will provide notification. The determination of the number of days should be done in coordination

with the installation/facility radiation protection officer (RPO). The RPO is responsible for insuring the proper license, authorization or permit is obtained prior to receipt of the radioactive material.

23.602 Contract clause.

The contracting officer shall insert the clause at 52.223-7, Notice of Radioactive Materials, in solicitations and contracts for supplies which are, or which contain— (a) radioactive material requiring specific licensing under regulations issued pursuant to the Atomic Energy Act of 1954; or (b) radioactive material not requiring specific licensing in which the specific activity is greater than 0.002 microcuries per gram or the activity per item equals or exceeds 0.01 microcuries. Such supplies include, but are not limited to, aircraft, ammunition, missiles, vehicles, electronic tubes, instrument panel gauges, compasses and identification markers.

Subpart 23.7—Contracting for Environmentally Preferable Products and Services

23.700 Scope.

This subpart prescribes policies for acquiring environmentally preferable products and services.

23.701 Definition.

“Biobased product,” as used in this subpart, means a commercial or industrial product (other than food or feed) that utilizes biological products or renewable domestic agricultural (plant, animal, and marine) or forestry materials.

23.702 Authorities.

(a) Resource Conservation and Recovery Act (RCRA) (42 U.S.C. 6901, *et seq.*).

(b) National Energy Conservation Policy Act (42 U.S.C. 8262g).

(c) Pollution Prevention Act of 1990 (42 U.S.C. 13101, *et seq.*).

(d) Executive Order 12856, of August 3, 1993, Federal Compliance with Right-to-Know Laws and Pollution Prevention Requirements.

(e) Executive Order 13101 of September 14, 1998, Greening the Government through Waste Prevention, Recycling, and Federal Acquisition.

(f) Executive Order 13123 of June 3, 1999, Greening the Government through Efficient Energy Management.

23.703 Policy.

Agencies must—

(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:

(1) Maximize the utilization of environmentally preferable products and services (based on EPA-issued guidance).

(2) Promote energy-efficiency and water conservation.

(3) Eliminate or reduce the generation of hazardous waste and the need for special material processing (including special handling, storage, treatment, and disposal).

(4) Promote the use of nonhazardous and recovered materials.

(5) Realize life-cycle cost savings.

(6) 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.

(7) Consider the use of biobased products.

23.704 Application to Government-owned or -leased facilities.

Executive Order 13101, Section 701, requires that contracts for contractor operation of a Government-owned or -leased facility and contracts for support services at a Government-owned or -operated facility include provisions that obligate the contractor to comply with the requirements of the order. Compliance includes developing programs to promote and implement cost-effective waste reduction and affirmative procurement programs required by 42 U.S.C. 6962 for all products designated in EPA's Comprehensive Procurement Guideline (40 CFR part 247).

23.705 Contract clause.

Insert the clause at 52.223-10, Waste Reduction Program, in all solicitations and contracts for contractor operation of Government-owned or -leased facilities and all solicitations and contracts for support services at Government-owned or -operated facilities.

Subpart 23.8—Ozone-Depleting Substances**23.800 Scope of subpart.**

This subpart sets forth policies and procedures for the acquisition of items which contain, use, or are manufactured with ozone-depleting substances.

23.801 Authorities.

- (a) Title VI of the Clean Air Act (42 U.S.C. 7671, *et seq.*).
- (b) Executive Order 12843, April 21, 1993.
- (c) Environmental Protection Agency (EPA) regulations, Protection of Stratospheric Ozone (40 CFR part 82).

23.802 [Reserved]**23.803 Policy.**

(a) It is the policy of the Federal Government that Federal agencies—

(1) Implement cost-effective programs to minimize the procurement of materials and substances that contribute to the depletion of stratospheric ozone; and

(2) Give preference to the procurement of alternative chemicals, products, and manufacturing processes that reduce overall risks to human health and the environment by lessening the depletion of ozone in the upper atmosphere.

(b) In preparing specifications and purchase descriptions, and in the acquisition of supplies and services, agencies shall ensure that acquisitions—

(1) Comply with the requirements of Title VI of the Clean Air Act, Executive Order 12843, and 40 CFR 82.84(a)(2), (3), (4), and (5); and

(2) Substitute safe alternatives to ozone-depleting substances, as identified under 42 U.S.C. 7671k, to the maximum extent practicable, as provided in 40 CFR 82.84(a)(1), except in the case of Class I substances being used for specified essential uses, as identified under 40 CFR 82.4(r).

23.804 Contract clauses.

Except for contracts to be performed outside the United States, its possessions, and Puerto Rico, the contracting officer shall insert the clause at:

(a) 52.223-11, Ozone-Depleting Substances, in solicitations and contracts for ozone-depleting substances or for supplies that may contain or be manufactured with ozone-depleting substances.

(b) 52.223-12, Refrigeration Equipment and Air Conditioners, in solicitations and contracts for services when the contract includes the maintenance, repair, or disposal of any equipment or appliance using ozone-depleting substances as a refrigerant, such as air conditioners, including motor vehicles, refrigerators, chillers, or freezers.

Subpart 23.9—Toxic Chemical Release Reporting

23.901 Purpose.

This subpart implements the requirements of Executive Order (E.O.) 12969 of August 8, 1995, Federal Acquisition and Community Right-To-Know. (See also EPA Notice, "Guidance Implementing Executive Order 12969" (60 FR 50738, September 29, 1995).)

23.902 General.

(a) The Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) and the Pollution Prevention Act of 1990 (PPA) established programs to protect public health and the environment by providing the public with important information on the toxic chemicals being released by manufacturing facilities into the air, land, and water in its communities.

(b) Under EPCRA section 313 (42 U.S.C. 11023), and PPA section 6607 (42 U.S.C. 13106), the owner or operator of certain manufacturing facilities is required to submit annual reports on toxic chemical releases and waste management activities to the Environmental Protection Agency (EPA) and the States.

23.903 Applicability.

(a) This subpart applies to all competitive contracts expected to exceed \$100,000 (including all options) and competitive 8(a) contracts.

(b) This subpart does not apply to—

(1) Acquisitions of commercial items as defined in Part 2; or

(2) Contractor facilities located outside the United States. (The United States, as used in this subpart, includes any State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the United States Virgin Islands, the Northern Mariana Islands, and any other territory or possession over which the United States has jurisdiction.)

23.904 Definition.

"Toxic chemicals," as used in this subpart, means reportable chemicals currently listed and added pursuant to EPCRA sections 313(c), (d) and (e), except for those chemicals deleted by EPA using the statutory criteria of EPCRA, sections 313(d) and (e).

23.905 Policy.

(a) It is the policy of the Government to purchase supplies and services that have been produced with a minimum adverse impact on community health and the environment.

(b) Federal agencies, to the greatest extent practicable, shall contract with companies that report in a public manner on toxic chemicals released to the environment.

23.906 Requirements.

(a) E.O. 12969 requires that solicitations for competitive contracts expected to exceed \$100,000 (including all options) include, to the maximum extent practicable, as an award eligibility criterion, a certification by the offeror that, if awarded a contract, either—

(1) As the owner or operator of facilities to be used in the performance of the contract that are subject to Form R filing and reporting requirements, the offeror will file, and will continue to file throughout the life of the contract, for such facilities, the Toxic Chemical Release Inventory Form (Form R) as described in EPCRA sections 313(a) and (g) and PPA section 6607; or

(2) Facilities to be used in the performance of the contract are exempt from Form R filing and reporting requirements because the facilities—

(i) Do not manufacture, process, or otherwise use any toxic chemicals listed under section 313(c) of EPCRA, 42 U.S.C. 11023(c);

(ii) Do not have 10 or more full-time employees as specified in section 313(b)(1)(A) of EPCRA, 42 U.S.C. 11023(b)(1)(A);

(iii) Do not meet the reporting thresholds of toxic chemicals established under section 313(f) of EPCRA, 42 U.S.C. 11023(f) (including the alternate thresholds at 40 CFR 372.27, provided an appropriate certification form has been filed with EPA);

(iv) Do not fall within Standard Industrial Classification Code (SIC) major groups 20 through 39 or their corresponding North American Industry Classification System (NAICS) sectors 31 through 33; or

(v) Are not located within any State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the United States Virgin Islands, the Northern Mariana Islands, or any other territory or possession over which the United States has jurisdiction.

(b) A determination that it is not practicable to include the solicitation provision at 52.223-13, Certification of Toxic Chemical Release Reporting, in a solicitation or class of solicitations shall be approved by a procurement official at a level no lower than the head of the contracting activity. Prior to making such a determination for a solicitation or class of solicitations with an estimated value in excess of \$500,000 (including all options), the agency shall consult with the Environmental Protection Agency, Director, Environmental Assistance Division, Office of Pollution Prevention and Toxic Substances (Mail Code 7408), Washington, DC 20460.

(c) Award shall not be made to offerors who do not certify in accordance with paragraph (a) of this section when the provision at 52.223-13, Certification of Toxic Chemical Release Reporting, is included in the solicitation. If facilities to be used by the offeror in the performance of the contract are not subject to Form R filing and reporting requirements and the offeror fails to check the appropriate box(es) in 52.223-13, Certification of Toxic Chemical Release Reporting, such failure shall be considered a minor informality or irregularity.

(d) The contracting officer shall cooperate with EPA representatives and provide such advice and assistance as may be required to aid EPA in the performance of its responsibilities under E.O. 12969.

(e) EPA, upon determining that a contractor is not filing the necessary forms or is filing incomplete information, may recommend to the head of the contracting activity that the contract be terminated for convenience. The head of the contracting activity shall consider the EPA recommendation

and determine if termination or some other action is appropriate.

23.907 Solicitation provision and contract clause.

Except for acquisitions of commercial items as defined in Part 2, the contracting officer shall—

(a) Insert the provision at 52.223-13, Certification of Toxic Chemical Release Reporting, in all solicitations for competitive contracts expected to exceed \$100,000 (including all options) and competitive 8(a) contracts, unless it has been determined in accordance with 23.906(b) that to do so is not practicable; and

(b) When the solicitation contains the provision at 52.223-13, Certification of Toxic Chemical Release Reporting, insert the clause at 52.223-14, Toxic Chemical Release Reporting, in the resulting contract, if the contract is expected to exceed \$100,000 (including all options).

Subpart 23.10—Federal Compliance with Right-to-Know Laws and Pollution Prevention Requirements

23.1001 Purpose.

This subpart implements requirements of Executive Order (E.O.) 12856 of August 3, 1993, Federal Compliance with Right-To-Know Laws and Pollution Prevention Requirements.

23.1002 Applicability.

The requirements of this subpart apply to facilities owned or operated by a Federal agency except those facilities located outside the several states of the United States, the District of Columbia, and the Commonwealth of Puerto Rico.

23.1003 Definition.

“Federal agency,” as used in this subpart, means an executive agency (see 2.101).

23.1004 Requirements.

(a) E.O. 12856 requires Federal facilities to comply with the provisions of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA)(42 U.S.C. 11001-11050) and the Pollution Prevention Act of 1990 (PPA)(42 U.S.C. 13101-13109).

(b) Pursuant to Section 1-104 of E.O. 12856, and any agency implementing procedures, every new contract that provides for performance on a Federal facility shall require the contractor to provide information necessary for the Federal agency to comply with the emergency planning and toxic release reporting requirements of EPCRA and PPA, and other agency obligations under E.O. 12856.

23.1005 Contract clause.

The contracting officer shall insert the clause at 52.223-5, Pollution Prevention and Right-to-Know Information, in all solicitations and contracts that provide for performance, in whole or in part, on a Federal facility.

* * * * *

52.223-1 [Reserved]

52.223-2 [Reserved]

52.223-3 Hazardous Material Identification and Material Safety Data.

As prescribed in 23.303, insert the following clause:

HAZARDOUS MATERIAL IDENTIFICATION AND MATERIAL SAFETY DATA (JAN 1997)

(a) "Hazardous material," as used in this clause, includes any material defined as hazardous under the latest version of Federal Standard No. 313 (including revisions adopted during the term of the contract).

(b) The offeror must list any hazardous material, as defined in paragraph (a) of this clause, to be delivered under this contract. The hazardous material shall be properly identified and include any applicable identification number, such as National Stock Number or Special Item Number. This information shall also be included on the Material Safety Data Sheet submitted under this contract.

Material <i>(If none, insert "None")</i>	Identification No.
_____	_____
_____	_____
_____	_____

(c) This list must be updated during performance of the contract whenever the Contractor determines that any other material to be delivered under this contract is hazardous.

(d) The apparently successful offeror agrees to submit, for each item as required prior to award, a Material Safety Data Sheet, meeting the requirements of 29 CFR 1910.1200(g) and the latest version of Federal Standard No. 313, for all hazardous material identified in paragraph (b) of this clause. Data shall be submitted in accordance with Federal Standard No. 313, whether or not the apparently successful offeror is the actual manufacturer of these items. Failure to submit the Material Safety Data Sheet prior to award may result in the apparently successful offeror being considered nonresponsible and ineligible for award.

(e) If, after award, there is a change in the composition of the item(s) or a revision to Federal Standard No. 313, which renders incomplete or inaccurate the data submitted under paragraph (d) of this clause, the Contractor shall promptly notify the Contracting Officer and resubmit the data.

(f) Neither the requirements of this clause nor any act or failure to act by the Government shall relieve the Contractor of any responsibility or liability for the safety of Government, Contractor, or subcontractor personnel or property.

(g) Nothing contained in this clause shall relieve the Contractor from complying with applicable Federal, State, and local laws, codes, ordinances, and regulations (including the obtaining of licenses and permits) in connection with hazardous material.

(h) The Government's rights in data furnished under this contract with respect to hazardous material are as follows:

(1) To use, duplicate and disclose any data to which this clause is applicable. The purposes of this right are to—

(i) Apprise personnel of the hazards to which they may be exposed in using, handling, packaging, transporting, or disposing of hazardous materials;

(ii) Obtain medical treatment for those affected by the material; and

(iii) Have others use, duplicate, and disclose the data for the Government for these purposes.

(2) To use, duplicate, and disclose data furnished under this clause, in accordance with paragraph (h)(1) of this clause, in precedence over any other clause of this contract providing for rights in data.

(3) The Government is not precluded from using similar or identical data acquired from other sources.

(End of clause)

Alternate I (July 1995). If the contract is awarded by an agency other than the Department of Defense, add the following paragraph (i) to the basic clause:

(i) Except as provided in paragraph (i)(2), the Contractor shall prepare and submit a sufficient number of Material Safety Data Sheets (MSDS's), meeting the requirements of 29 CFR 1910.1200(g) and the latest version of Federal Standard No. 313, for all hazardous materials identified in paragraph (b) of this clause.

(1) For items shipped to consignees, the Contractor shall include a copy of the MSDS's with the packing list or other suitable shipping document which accompanies each shipment. Alternatively, the Contractor is permitted to transmit MSDS's to consignees in advance of receipt of shipments by consignees, if authorized in writing by the Contracting Officer.

(2) For items shipped to consignees identified by mailing address as agency depots, distribution centers or customer supply centers, the Contractor shall provide one copy of the MSDS's in or on each shipping container. If affixed to the outside of each container, the MSDS's must be placed in a weather resistant envelope.

52.223-4 Recovered Material Certification.

As prescribed in 23.406(a), insert the following provision:

RECOVERED MATERIAL CERTIFICATION (OCT 1997)

As required by the Resource Conservation and Recovery Act of 1976 (42 U.S.C. 6962(c)(3)(A)(i)), the offeror certifies, by signing this offer, that the percentage of recovered materials to be used in the performance of the contract will be

at least the amount required by the applicable contract specifications.

(End of provision)

52.223-5 Pollution Prevention and Right-to-Know Information.

As prescribed in 23.1005, insert the following clause:

POLLUTION PREVENTION AND RIGHT-TO-KNOW
INFORMATION (APR 1998)

(a) Executive Order 12856 of August 3, 1993, requires Federal facilities to comply with the provisions of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) (42 U.S.C. 11001-11050) and the Pollution Prevention Act of 1990 (PPA) (42 U.S.C. 13101-13109).

(b) The Contractor shall provide all information needed by the Federal facility to comply with the emergency planning reporting requirements of Section 302 of EPCRA; the emergency notice requirements of Section 304 of EPCRA; the list of Material Safety Data Sheets required by Section 311 of EPCRA; the emergency and hazardous chemical inventory forms of Section 312 of EPCRA; the toxic chemical release inventory of Section 313 of EPCRA, which includes the reduction and recycling information required by Section 6607 of PPA; and the toxic chemical reduction goals requirements of Section 3-302 of Executive Order 12856.

(End of clause)

52.223-6 Drug-Free Workplace.

As prescribed in 23.505, insert the following clause:

DRUG-FREE WORKPLACE (MAY 2001)

(a) *Definitions.* As used in this clause—

“Controlled substance” means a controlled substance in schedules I through V of section 202 of the Controlled Substances Act (21 U.S.C. 812) and as further defined in regulation at 21 CFR 1308.11 - 1308.15.

“Conviction” means a finding of guilt (including a plea of *nolo contendere*) or imposition of sentence, or both, by any judicial body charged with the responsibility to determine violations of the Federal or State criminal drug statutes.

“Criminal drug statute” means a Federal or non-Federal criminal statute involving the manufacture, distribution, dispensing, possession, or use of any controlled substance.

“Drug-free workplace” means the site(s) for the performance of work done by the Contractor in connection with a specific contract where employees of the Contractor are prohibited from engaging in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance.

“Employee” means an employee of a Contractor directly engaged in the performance of work under a Government contract. “Directly engaged” is defined to include all direct

cost employees and any other Contractor employee who has other than a minimal impact or involvement in contract performance.

“Individual” means an offeror/contractor that has no more than one employee including the offeror/contractor.

(b) The Contractor, if other than an individual, shall— within 30 days after award (unless a longer period is agreed to in writing for contracts of 30 days or more performance duration), or as soon as possible for contracts of less than 30 days performance duration—

(1) Publish a statement notifying its employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the Contractor's workplace and specifying the actions that will be taken against employees for violations of such prohibition;

(2) Establish an ongoing drug-free awareness program to inform such employees about—

(i) The dangers of drug abuse in the workplace;

(ii) The Contractor's policy of maintaining a drug-free workplace;

(iii) Any available drug counseling, rehabilitation, and employee assistance programs; and

(iv) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;

(3) Provide all employees engaged in performance of the contract with a copy of the statement required by paragraph (b)(1) of this clause;

(4) Notify such employees in writing in the statement required by paragraph (b)(1) of this clause that, as a condition of continued employment on this contract, the employee will—

(i) Abide by the terms of the statement; and

(ii) Notify the employer in writing of the employee's conviction under a criminal drug statute for a violation occurring in the workplace no later than 5 days after such conviction;

(5) Notify the Contracting Officer in writing within 10 days after receiving notice under subdivision (b)(4)(ii) of this clause, from an employee or otherwise receiving actual notice of such conviction. The notice shall include the position title of the employee;

(6) Within 30 days after receiving notice under subdivision (b)(4)(ii) of this clause of a conviction, take one of the following actions with respect to any employee who is convicted of a drug abuse violation occurring in the workplace:

(i) Taking appropriate personnel action against such employee, up to and including termination; or

(ii) Require such employee to satisfactorily participate in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency; and

(7) Make a good faith effort to maintain a drug-free workplace through implementation of paragraphs (b)(1) through (b)(6) of this clause.

(c) The Contractor, if an individual, agrees by award of the contract or acceptance of a purchase order, not to engage in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance while performing this contract.

(d) In addition to other remedies available to the Government, the Contractor's failure to comply with the requirements of paragraph (b) or (c) of this clause may, pursuant to FAR 23.506, render the Contractor subject to suspension of contract payments, termination of the contract or default, and suspension or debarment.

(End of clause)

52.223-7 Notice of Radioactive Materials.

As prescribed in 23.602, insert the following clause:

NOTICE OF RADIOACTIVE MATERIALS (JAN 1997)

(a) The Contractor shall notify the Contracting Officer or designee, in writing, _____* days prior to the delivery of, or prior to completion of any servicing required by this contract of, items containing either (1) radioactive material requiring specific licensing under the regulations issued pursuant to the Atomic Energy Act of 1954, as amended, as set forth in Title 10 of the Code of Federal Regulations, in effect on the date of this contract, or (2) other radioactive material not requiring specific licensing in which the specific activity is greater than 0.002 microcuries per gram or the activity per item equals or exceeds 0.01 microcuries. Such notice shall specify the part or parts of the items which contain radioactive materials, a description of the materials, the name and activity of the isotope, the manufacturer of the materials, and any other information known to the Contractor which will put users of the items on notice as to the hazards involved (OMB No. 9000-0107).

* The Contracting Officer shall insert the number of days required in advance of delivery of the item or completion of the servicing to assure that required licenses are obtained and appropriate personnel are notified to institute any necessary safety and health precautions. See FAR 23.601(d).

(b) If there has been no change affecting the quantity of activity, or the characteristics and composition of the radioactive material from deliveries under this contract or prior contracts, the Contractor may request that the Contracting Officer or designee waive the notice requirement in paragraph (a) of this clause. Any such request shall—

(1) Be submitted in writing;

(2) State that the quantity of activity, characteristics, and composition of the radioactive material have not changed; and

(3) Cite the contract number on which the prior notification was submitted and the contracting office to which it was submitted.

(c) All items, parts, or subassemblies which contain radioactive materials in which the specific activity is greater than 0.002 microcuries per gram or activity per item equals or exceeds 0.01 microcuries, and all containers in which such items, parts or subassemblies are delivered to the Government shall be clearly marked and labeled as required by the latest revision of MIL-STD 129 in effect on the date of the contract.

(d) This clause, including this paragraph (d), shall be inserted in all subcontracts for radioactive materials meeting the criteria in paragraph (a) of this clause.

(End of clause)

52.223-8 [Reserved]

52.223-9 Estimate of Percentage of Recovered Material Content for EPA-Designated Products.

As prescribed in 23.406(b), insert the following clause:

ESTIMATE OF PERCENTAGE OF RECOVERED MATERIAL CONTENT FOR EPA-DESIGNATED PRODUCTS (AUG 2000)

(a) *Definitions.* As used in this clause—

“Postconsumer material” means a material or finished product that has served its intended use and has been discarded for disposal or recovery, having completed its life as a consumer item. Postconsumer material is a part of the broader category of “recovered material.”

“Recovered material” means waste materials and by-products recovered or diverted from solid waste, but the term does not include those materials and by-products generated from, and commonly reused within, an original manufacturing process.

(b) The Contractor, on completion of this contract, shall—

(1) Estimate the percentage of the total recovered material used in contract performance, including, if applicable, the percentage of postconsumer material content; and

(2) Submit this estimate to _____
[Contracting Officer complete in accordance with agency procedures].

(End of clause)

Alternate I (Aug 2000). As prescribed in 23.406(b), redesignate paragraph (b) of the basic clause as paragraph (c) and add the following paragraph (b) to the basic clause:

(b) The Contractor shall execute the following certification required by the Resource Conservation and Recovery Act of 1976 (42 U.S.C. 6962(i)(2)(C)):

CERTIFICATION

I, _____ (name of certifier), am an officer or employee responsible for the performance of this contract and hereby certify that the percentage of recovered material content for EPA-designated products met the applicable contract specifications.

[Signature of the Officer or Employee]

[Typed Name of the Officer or Employee]

[Title]

[Name of Company, Firm, or Organization]

[Date]

(End of certification)

52.223-10 Waste Reduction Program.

As prescribed in 23.705, insert the following clause:

WASTE REDUCTION PROGRAM (AUG 2000)

(a) Definitions. As used in this clause—

“Recycling” means the 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 products other than fuel for producing heat or power by combustion.

“Waste prevention” means any change in the design, manufacturing, purchase, or use of materials or products (including packaging) to reduce their amount or toxicity before they are discarded. Waste prevention also refers to the reuse of products or materials.

“Waste reduction” means preventing or decreasing the amount of waste being generated through waste prevention, recycling, or purchasing recycled and environmentally preferable products.

(b) Consistent with the requirements of Section 701 of Executive Order 13101, the Contractor shall establish a program to promote cost-effective waste reduction in all operations and facilities covered by this contract. The Contractor's programs shall comply with applicable Federal, State, and local requirements, specifically including Section 6002 of the Resource Conservation and Recovery Act (42 U.S.C. 6962, *et seq.*) and implementing regulations (40 CFR part 247).

(End of clause)

52.223-11 Ozone-Depleting Substances.

As prescribed in 23.804(a), insert the following clause:

OZONE-DEPLETING SUBSTANCES (MAY 2001)

(a) Definition. “Ozone-depleting substance,” as used in this clause, means any substance the Environmental Protection Agency designates in 40 CFR part 82 as—

(1) Class I, including, but not limited to, chlorofluorocarbons, halons, carbon tetrachloride, and methyl chloroform; or

(2) Class II, including, but not limited to, hydrochlorofluorocarbons.

(b) The Contractor shall label products which contain or are manufactured with ozone-depleting substances in the manner and to the extent required by 42 U.S.C. 7671j (b), (c), and (d) and 40 CFR part 82, Subpart E, as follows:

WARNING

Contains (or manufactured with, if applicable) * _____, a substance(s) which harm(s) public health and environment by destroying ozone in the upper atmosphere.

* The Contractor shall insert the name of the substance(s).

(End of clause)

52.223-12 Refrigeration Equipment and Air Conditioners.

As prescribed in 23.804(b), insert the following clause:

REFRIGERATION EQUIPMENT AND AIR CONDITIONERS (MAY 1995)

The Contractor shall comply with the applicable requirements of Sections 608 and 609 of the Clean Air Act (42 U.S.C. 7671g and 7671h) as each or both apply to this contract.

(End of clause)

52.223-13 Certification of Toxic Chemical Release Reporting.

As prescribed in 23.907(a), insert the following provision:

CERTIFICATION OF TOXIC CHEMICAL RELEASE REPORTING (OCT 2000)

(a) Submission of this certification is a prerequisite for making or entering into this contract imposed by Executive Order 12969, August 8, 1995.

(b) By signing this offer, the offeror certifies that—

(1) As the owner or operator of facilities that will be used in the performance of this contract that are subject to the filing and reporting requirements described in section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) (42 U.S.C. 11023) and section 6607 of the Pollution Prevention Act of 1990 (PPA) (42 U.S.C. 13106), the offeror will file and continue to file for such facilities for the life of the contract the Toxic Chemical Release Inventory Form (Form R) as described in sections 313(a) and (g) of EPCRA and section 6607 of PPA; or

(2) None of its owned or operated facilities to be used in the performance of this contract is subject to the Form R filing and reporting requirements because each such facility is exempt for at least one of the following reasons: [*Check each block that is applicable.*]

[] (i) The facility does not manufacture, process, or otherwise use any toxic chemicals listed under section 313(c) of EPCRA, 42 U.S.C. 11023(c);

[] (ii) The facility does not have 10 or more full-time employees as specified in section 313(b)(1)(A) of EPCRA, 42 U.S.C. 11023(b)(1)(A);

[] (iii) The facility does not meet the reporting thresholds of toxic chemicals established under section 313(f) of EPCRA, 42 U.S.C. 11023(f) (including the alternate thresholds at 40 CFR 372.27, provided an appropriate certification form has been filed with EPA);

[] (iv) The facility does not fall within Standard Industrial Classification Code (SIC) major groups 20 through 39 or their corresponding North American Industry Classification System (NAICS) sectors 31 through 33; or

[] (v) The facility is not located within any State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the United States Virgin Islands, the Northern Mariana Islands, or any other territory or possession over which the United States has jurisdiction.

(End of provision)

52.223-14 Toxic Chemical Release Reporting.

As prescribed in 23.907(b), insert the following clause:

TOXIC CHEMICAL RELEASE REPORTING (OCT 2000)

(a) Unless otherwise exempt, the Contractor, as owner or operator of a facility used in the performance of this contract, shall file by July 1 for the prior calendar year an annual Toxic Chemical Release Inventory Form (Form R) as described in sections 313(a) and (g) of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) (42 U.S.C. 11023(a) and (g)), and section 6607 of the Pollution Prevention Act of 1990 (PPA) (42 U.S.C. 13106). The Contractor shall file, for each facility subject to the Form R filing and reporting requirements, the annual Form R throughout the life of the contract.

(b) A Contractor owned or operated facility used in the performance of this contract is exempt from the requirement to file an annual Form R if—

(1) The facility does not manufacture, process, or otherwise use any toxic chemicals listed under section 313(c) of EPCRA, 42 U.S.C. 11023(c);

(2) The facility does not have 10 or more full-time employees as specified in section 313(b)(1)(A) of EPCRA, 42 U.S.C. 11023(b)(1)(A);

(3) The facility does not meet the reporting thresholds of toxic chemicals established under section 313(f) of EPCRA, 42 U.S.C. 11023(f) (including the alternate thresholds at 40 CFR 372.27, provided an appropriate certification form has been filed with EPA);

(4) The facility does not fall within Standard Industrial Classification Code (SIC) major groups 20 through 39 or their corresponding North American Industry Classification System (NAICS) sectors 31 through 33; or

(5) The facility is not located within any State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the United States Virgin Islands, the Northern Mariana Islands, or any other territory or possession over which the United States has jurisdiction.

(c) If the Contractor has certified to an exemption in accordance with one or more of the criteria in paragraph (b) of this clause, and after award of the contract circumstances change so that any of its owned or operated facilities used in the performance of this contract is no longer exempt—

(1) The Contractor shall notify the Contracting Officer; and

(2) The Contractor, as owner or operator of a facility used in the performance of this contract that is no longer exempt, shall—

(i) Submit a Toxic Chemical Release Inventory Form (Form R) on or before July 1 for the prior calendar year during which the facility becomes eligible; and

(ii) Continue to file the annual Form R for the life of the contract for such facility.

(d) The Contracting Officer may terminate this contract or take other action as appropriate, if the Contractor fails to comply accurately and fully with the EPCRA and PPA toxic chemical release filing and reporting requirements.

(e) Except for acquisitions of commercial items as defined in FAR Part 2, the Contractor shall—

(1) For competitive subcontracts expected to exceed \$100,000 (including all options), include a solicitation provision substantially the same as the provision at FAR 52.223-13, Certification of Toxic Chemical Release Reporting; and

(2) Include in any resultant subcontract exceeding \$100,000 (including all options), the substance of this clause, except this paragraph (e).

(End of clause)

52.224-1 Privacy Act Notification.

As prescribed in 24.104, insert the following clause in solicitations and contracts, when the design, development, or operation of a system of records on individuals is required to accomplish an agency function:

PRINCIPLE TYPE AND/OR PURPOSE OF CONTRACT

PROVISION OR CLAUSE	PRESCRIBED IN	P OR C	IBR	UCF	FP SUP	CR SUP	FP R&D	CR R&D	FP SVC	CR SVC	FP CON	CR CON	T&M LH	LMV	COM SVC	DDR	A&E	FAC	IND DEL	TRN	SAP	UTIL SVC	CI
52.223-3 Hazardous Material Identification and Material Safety Data.	23.303	C	Yes	I	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
Alternative 1	23.303(b)	C	Yes	I	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
52.223-4 Recovered Material Certification	23.406(a)	P	Yes	K	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
52.223-5 Pollution Prevention and Right-to-Know Information.	23.1005	C	Yes	I	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
52.223-6 Drug-Free Workplace.	23.505	C	Yes	I	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
52.223-7 Notice of Radioactive Materials.	23.602	C	No	I	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
52.223-9 Estimate of Percentage of Recovered Material Content for EPA Designated Products.	23.406(b)	C	No	I	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Alternative 1	23.406(b)	C	No	I	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
52.223-10 Waste Reduction Program.	23.705	C	Yes	I					A	A									A				
52.223-11 Ozone-Depleting Substances.	23.804(a)	C	No	I	A	A																	
52.223-12 Refrigeration Equipment and Air Conditioners.	23.804(b)	C	Yes	I					A	A													
52.223-13 Certification of Toxic Chemical Release Reporting	23.907(a)	P	No	K	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
52.223-14 Toxic Chemical Release Reporting	23.907(b)	C	Yes	I	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R

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Contracting Approaches – Their Plusses and Minuses from a Sustainability Standpoint

Issues

- In-House vs. Contract
 - Accomplishing Entire Project In-House Not a Frequent Choice for Most Federal Agencies
 - Staff Capabilities at Issue
- Prescriptive vs. Performance-Based
- Separate Design and Construction Contracts vs. Unified Contracts

Design-Bid-Build Contracts

- Advantages from a Sustainability Standpoint
 - Ability to Emphasize Sustainability Focus in Announcement and Selection Criteria
 - Ability to Select Designer to Specifically Match Project Requirements
 - Ability to Ascertain Where Sustainability Knowledge and Experience Lies
 - Within Existing Staff
 - Obtained Through Consultants
 - Ability to Negotiate Scope, Process and Procedures
 - Generally Greater Familiarity on the Part of Both Agency and Customer
- Disadvantages from a Sustainability Standpoint
 - Breadth of Design Ideas Limited
 - Generally Responsive to Owner's Specific Requirements (Generally Prescriptive)
 - Selection of Designer Based on Reputation and Qualifications, Not Any Specific Ideas or Proposals for Project at Hand
 - Timeframes that May Delay Mobilization of the Design Team and Certainly will Delay Identification and Involvement of the Construction Team
 - Potential Fragmentation of Design Team
 - Consultants, Even if Identified, Not Necessarily the Ones Used
 - Key Players Often Provided by Consultants
 - Definite Fragmentation of Total Building Team
 - Typical Emphasis on Low-Bid Construction Contracts
 - Potential Adversarial Relationship Between Designer and Builder
 - Difficulty in Establishing with Surety the Final Construction Cost
 - Potential Delays Due to Design Rework
 - Potential Budget Busts
 - Potential for Conservatism on the Part of the Designer

Design-Build Contracts

- Advantages from a Sustainability Standpoint
 - Ability to Emphasize Sustainability Focus in Announcement and Selection Criteria
 - Ability to Select Entire Project Team to Specifically Match Project Requirements

- Ability to Ascertain Where Sustainability Knowledge and Experience Lies
 - Within Existing Staff
 - Obtained Through Consultants
- Timeframes that Generally Mobilize Both the Design Team and the Construction Team Soon After Selection
- Breadth of Design Ideas Substantially Unlimited
 - Generally Responsive to Owners Performance Requirements
 - Short List Based on Reputation and Qualifications, but Potential for Wide Variation in Technical Proposals by Final Group Under Consideration
- Potential for Strong Unification of Both Design Team and Building Team
 - Elimination of Potential Adversarial Relationship between Designers and Builders
 - Involvement of Builder in Key Design Decisions from Outset of Project
- Ability to Establish Surety of the Final Construction Cost
 - Elimination of Emphasis on Low-Bid Construction Contracts – Ceiling Already Established in Project Requirements
 - Elimination of Delays Due to Design Rework – No Change Orders
 - Elimination of Budget Busts
- Potential for “Pushing the Envelope” with Respect to Innovation and Creativity on the Part of both the Designer and the Builder
- Disadvantages from a Sustainability Standpoint
 - Increased Emphases on the Ability of the Owner to Define Scope, Process and Procedures from a Performance Standpoint
 - A Disadvantage Only if Not Done Correctly
 - Emphasis on More Extensive Owner Involvement Up Front
 - Emphasis on the Owners Commitment of the Best People to Project Definition
 - Generally Less Familiarity on the Part of Both Agency and Customer

Indefinite Delivery (IDIQ) Contracts

- Advantages from a Sustainability Standpoint
 - Ease of Use
 - Quickness to Mobilization
 - Potential for Site Familiarity
- Disadvantages from a Sustainability Standpoint
 - Selection of Designer Primarily Based on Convenience and Availability, Not Necessarily Reputation and Qualifications Uniquely Matched to the Project Requirements, and Not Any Specific Ideas of Proposals for the Project at Hand
 - Breadth of Design Ideas Significantly Limited
 - No Competitive Environment to Foster Idea Development
 - Generally Responsive to Owner’s Specific Requirements (Generally Prescriptive)
 - Potential Inability to Access and Use to Best People for the Project at Hand Due to Their Commitment to Other Projects
 - Potential for the IDIQ Contractor to “Broker” the Work to Third Parties Over Whom the Owner has Little or No Involvement in Selection
 - Strong Likelihood for Fragmentation of the Design Team
 - Key Players Often Provided by Consultants
 - Consultants Generally Unknown
 - Definite Fragmentation of Total Building Team
 - Typical Emphasis on Low-Bid Construction Contracts
 - Potential Adversarial Relationship Between Designer and Builder
 - Difficulty in Establishing with Surety the Final Construction Cost
 - Potential Delays Due to Design Rework
 - Potential Budget Busts
 - Potential for Conservatism on the Part of the Designer

Excerpted from:
**SUSTAINABLE FEDERAL FACILITIES:
A GUIDE TO INTEGRATING VALUE-ENGINEERING, LIFE CYCLE
CLOSTING, AND SUSTAINABLE DEVELOPMENT**

FEDERAL FACILITIES COUNCIL 2001

The key decisions to be make in this phase are:

- selection of contractors to design and possibly to construct or renovate the facility.
- quality of design and construction expected.
- whether the agency will seek to meet a particular standard as guidance for integrating sustainable development
- orientation of the building on the site with adjacent support facilities (access, roads, parking, utilities, and so forth).
- choice of systems and technologies.
- landscaping concepts
- how to integrate the various systems, materials, siting choices to achieve the lowest life-cycle costs

Typically, after funding has been approved, an agency identifies the strategy for selecting the entity that will prepare the detailed facility design. The first step may involve developing contract documents to solicit bids for design only (using a design-bid-build contract method) or possibly design and construction services (using a design-build contract) from private sector architectural and engineering firms and construction companies. Development of the contract documents will be facilitated if the agency has used an integrated project team that includes contract officers.

Decisions made about the selection of materials, technologies, and systems to be incorporated into a building will significantly affect its operation and maintenance, its overall sustainability and the ease and cost of disposal. For example, floor tile instead of carpet may result in lower maintenance costs and longer service life, and thus be more sustainable during the building's life. Building systems or materials containing or using toxic or hazardous materials will make it more difficult and costly to dismantle and dispose of the facility.

Contract Considerations

- What level of sustainability is to be achieved? For example, is the building to achieve a certified, silver, gold, or platinum level of sustainability under a "green building" rating system such as the U.S. Green Building Council's Leadership in Energy and Environment Design (LEED™, described in chapters 4 and 5)? Is the building to meet Energy Star™ goals?
- What are the implications for sustainable development if the agency specifies design criteria? If the agency uses a performance-based contract?
- What contract method will best support the achievement of sustainable development objectives?

- What are the implications of the choice of project delivery method (i.e., design-bid-build, design-build, or other processes for sustainable development)? If design-build is the contract method, how will the requirements and incentives related to sustainable construction practices and features be enforced? If design-bid-build is used how will architects and engineers be compensated for any additional effort to find optimal solutions for achieving sustainable development goals?
- What are the implications of the choice of project delivery method for value engineering analyses? For example, the application of value engineering on design-build contracts may require special consideration. Value engineering should be used to evaluate the project requirements during the conceptual planning phase, which is normally done by the architectural and engineering firm prior to award of a design-build contract. It may be appropriate to use value engineering during design development with the design-build team; however, any design changes, either cost savings or increases, will need to be negotiated and balanced against sustainable goals.
- What are the implications of the contract selection procedure (e.g., lowest bid or best value) for meeting sustainable development objectives? If contractor selection is based on best value, life-cycle cost savings may be considered a primary evaluation factor. Contract options and value engineering proposals that reduce life-cycle costs may also be considered.
- What types of incentives and clauses should be added to contracts to promote sustainable features in the final design or construction? One example may be to include a requirement for a sustainable design consultant to ensure that sustainable features are incorporated and preserved throughout the design, construction, and start-up phases. Performance-based contracts can stipulate that the designer should maximize building energy efficiency and incorporate other resource-conserving, sustainable building features.
- Who will determine whether the incentive clauses have been met and how?
- What types of evaluations will be used to determine whether an architectural and engineering firms has the requisite experience to incorporate sustainable design features?
- What measure will be used to determine whether the design is sustainable?
- Will the construction contractor be responsible for sustainable construction practices, such as protection of trees on site and disposal of materials in an appropriate manner? Who will be responsible for monitoring and enforcing the implementation of such contract clauses?
- Will a team be established (e.g. architects, engineers, construction contractor, and operations and maintenance contractor) to be responsible for conducting a building start-up to ensure that all systems and equipment operate as intended?
- What levels of commissioning is required? Who is liable for failures to meet these requirements? How will failures be remedied?
- Will the A-E firm or construction contractor be responsible for compiling a building operations manual containing the as-built conditions, defining maintenance schedules, predicting life-cycle repair and replacement, and so forth? If so, what documentation standards will be used?
- Who will approve such a manual? When will the manual be submitted?

PGBO SAMPLE CONTRACT LANGUAGE FOR A&E SELECTION

SUSTAINABLE DESIGN AND CONSTRUCTION PRACTICES

The U.S. Government has adopted sustainable design as the guiding principle for its planning, design and construction projects. By definition, this means meeting present needs without compromising the ability of future generations to meet their own needs. In practice, sustainable design utilizes best available solutions within the design tradition and conserves global resources, utilizes energy efficiently, recycles materials and waste, and specifies ecologically responsible methods, practices, and materials in the construction, maintenance and operation of Government facilities. Accordingly, the selected firm(s) must exhibit current credentials and demonstrated competency in sustainable design certification and membership in professionally recognized organizations that promulgate sustainable practices.

The National Park Service, Pacific West Region has implemented Directive PW-048 which delineates how it emphasizes the concept of sustainability with respect to design and construction practices. Implementing sustainable design and construction practices is the constant process of identifying and incorporating activities and actions during facility planning, design, construction and operation to meet the following goals:

- a. Consume less energy and natural resources over the life of the facility;
- b. Ensure that resources such as water, air and land are as clean or cleaner at the end of use as at the beginning;
- c. Ensure that the viability, integrity and diversity of natural systems are protected, undiminished and maintained;
- d. Ensure that natural sound-scape and dark skies are undiminished;
- e. Use environmental technologies and products that have less negative impacts on human health and the environment;
- f. Reduce the material entering landfills; and
- g. Ensure compliance with all natural and cultural requirements.

EXECUTIVE ORDERS

In accordance with Public Law 100-418 and Executive Order 12770, as of January 1994, all Federal design work will be done using the metric system of weights and measures. Work done under this contract may be subject to this requirement. The government will not indemnify the firm selected against liability involving asbestos or other hazardous materials; that is, a clause holding the firm harmless will not be included in the contract.

Executive Order 13101 – Greening the Government Through Waste Prevention, Recycling, and Federal Acquisition,” (September 14, 1998). This Executive Order requires Federal Agencies to incorporate waste prevention and recycling in the agency’s operation and work to increase and expand markets for recovered materials through greater Federal government preference and demand for such products. In developing work plans, work statements and specifications, agencies must consider the “elimination of virgin materials requirements, use of bio-based products, use of recovered materials,

reuse of product, lifecycle cost and lifecycle assessment, recycle ability, use of environmental preferable products, waste prevention and ultimate disposal.”

The Resource Conservation Recovery Act (RCRA), Section 6002, and Executive Order 113101 require the purchase of Environmental Protection Agency (EPA) designated products with a required minimum recovered material content as described in an Agency’s Affirmative Procurement Program (APP). This list of EPA-designated products is available at <http://www.epa.gov/cpg>. This requirement applies to all contracts that require EPA-designated products. When purchasing a product or products on this list without the required minimum recovered material content, a written justification based on specific exemptions is required by FAR 23.405c. A&E firms and their consultants are required to be familiar with EPA guidelines by developing specifications utilizing EPA’s minimum recycled content standards. If products specified by the A&E do not meet EPA’s guidelines, the A&E must prepare written justifications in accordance with FAR 23.405c.

A&E firms are to use life cycle cost analysis, wherever feasible and appropriate to assist selection of products and services. Whenever possible, costs shall be calculated over the life of the item, not just the initial, up-front cost. When comparing alternative products, the initial cost of acquisition as well as maintenance costs, operational costs, etc., must be considered in the analysis. A product having a higher initial cost may have lower operational costs or higher resale value and will, therefore, prove to be a better value and more cost effective compared to the alternatives.

EXAMPLES OF CONSTRUCTION WASTE MANAGEMENT CONTRACT LANGUAGE

Example 1. Pentagon Metro Entrance Facility Project¹

In this project, a distinction was made between waste minimization and waste management based on recognition that achieving good performance on waste minimization will positively impact waste management. Also, based on the experience of the consultant on the project, it was determined that much of non-construction waste is packaging and minimizing that up front was an important goal. Also, the specification encourages contractors to assemble building components off-site that has a positive impact on minimizing construction waste.

SECTION 01505 - CONSTRUCTION WASTE MANAGEMENT

PART 1 - GENERAL

1.1 DESCRIPTION

- A. The Government has established that this Project shall include proactive measures for waste management participation by all parties to the contract.
 - 1. The purpose of this program is to ensure that during the course of the Project all diligent means are employed to pursue practical and economically feasible waste management and recycling options.
 - 2. Upon award, each subcontractor shall be required to furnish documentation from suppliers or manufacturers regarding waste management and recycling options for those products and procedures furnished.
 - 3. Waste disposal to landfills shall be minimized.
 - 4. Incineration of construction debris and other waste shall not be permitted.

- B. Definitions:
 - 1. Construction Waste Management Plan: An integrated approach to maximizing the recycling of construction and demolition waste through active cooperation of General Contractor, subcontractors, material suppliers and Owner.
 - 2. Waste: Any material that has reached the end of its intended use. Waste includes salvageable, returnable, recyclable and reusable material.
 - 3. Construction waste: Solid wastes including, but not limited to, building materials, packaging materials, debris and trash resulting from construction operations.
 - 4. Salvage: To remove a waste material from the Project site to another site for resale or reuse by others.
 - 5. Hazardous waste: Any material or byproduct of construction that is regulated by the Environmental Protection Agency and that may not be disposed in any landfill or other waste end-source without adherence to applicable laws.
 - 6. Trash: Any product or material unable to be returned, reused, recycled or salvaged.
 - 7. Landfill: Any public or private business involved in the practice of trash disposal.

¹ Obtained from Bruce Maine, Research Director - Sustainable Design Services, HDR Architecture, bmaine@hdrinc.com

1.2 SUBMITTALS

- A. Project information.
 - 1. Material supplier's waste minimization plan.
 - 2. Subcontractor's waste minimization plan.
 - 3. Characterization of each trades anticipated waste.

1.3 CONSTRUCTION WASTE MANAGEMENT PLAN

- A. Construction Waste Management Plan shall include the following:
 - 1. Each material supplier shall submit documentation regarding proactive procedures for minimizing the amount of packaging waste for project related deliveries.
 - a. Packaging shall include, but not be limited to: cardboard, bubblewrap, stretchwrap, crating, wood or plastic pallets and metal strapping.
 - b. Coordinate with General Contractor availability of resources at jobsite to recycle any packaging material and verify with trades protocol for recycling.
 - c. Where elimination of packaging will not effect warranty, compromising of storage requirements or sequencing of construction, such materials will not be packaged without consent of Contractor.
 - 2. Each subcontractor shall submit documentation regarding the amount and characterization of construction demolition waste materials that are anticipated as a result of their construction activities.
 - a. Each trade shall be responsible for collection of waste materials that result from the installation of their work in the proper receptacles as located by the General Contractor.
 - 3. Final documentation of hazardous waste disposal plan.
- B. Construction Waste Management Plan Implementation:
 - 1. The Contractor shall procure the services of an on-site party (or parties) herein referred to as "Recycling Coordinator" who will instruct the General Contractor and all subcontractors in the application of the Waste Management Plan.
 - 2. Recycling Coordinator shall be responsible for maintaining recycling containers in orderly fashion and for their relocation when required by construction phasing.
 - 3. Recycling Coordinator shall be responsible for maintaining waste containers.
 - a. Recycle and waste bin areas are to be maintained in an orderly manner and clearly marked to avoid contamination of materials.
 - b. Segregation of construction debris for reuse, recycling and salvage shall comply with requirements of Division 1 Section "Environmental Protection."
 - 4. Hazardous wastes:
 - a. Hazardous wastes shall be separated, stored and disposed of in accordance with local and EPA regulations.

5. Organic Waste:
 - a. Contractor shall provide bins for the mulching of organic wastes.
 - b. No biodegradable materials shall be deposited in solid waste containers.

C. Targeted Materials:

1. The following materials are targeted for recycling:
 - a. Metals.
 - b. Cardboard.
 - c. Wood (including pallets).
 - d. Plastics (including pallets and miscellaneous packaging).
 - e. Asphalt materials.
 - f. Concrete waste.
 - g. Masonry waste.
 - h. Paints.

1.4 WASTE MINIMIZATION

A. Construction Waste Management Plan shall include the following:

1. Each material supplier shall submit documentation regarding proactive procedures for minimizing the amount of packaging waste for project related deliveries.
 - a. Packaging shall include, but not be limited to: cardboard, bubble wrap, stretch wrap, crating, wood or plastic pallets and metal strapping.
 - b. Coordinate with General Contractor availability of resources at jobsite to recycle any packaging material and verify with trades protocol for recycling.
 - c. Where elimination of packaging will not effect warranty, compromising of storage requirements or sequencing of construction, such materials will not be packaged without consent of Contractor.
2. Contractors are encouraged to assemble components off-site to minimize on-site waste.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION 01505

**EXAMPLE 2: FROM US EPA PROJECT:
CONSTRUCTION WASTE MANAGEMENT (JUL 2000)**

(OPTIONAL PARAGRAPH, EXCEPT MANDATORY WHEN LEASING SPACE TO BE PROVIDED BY NEW CONSTRUCTION OR MAJOR IMPROVEMENTS OF EXISTING BUILDING. IF USED, MAY BE ALTERED, BUT SHOULD CONTAIN SUBSTANTIALLY THE SAME INFORMATION.)

- (a) Recycling construction waste means providing all services necessary to furnish construction materials or wastes to organizations which will employ these materials or wastes in the production of new materials. Recycling includes required labor and equipment necessary to separate individual materials from the assemblies of which they form a part.
- (b) The Offeror shall submit to the Government their proposal to dispose of or recycle construction waste. Where the small quantity of material, the extraordinarily complex nature of the waste disposal method, or prohibitive expense for recycling would represent a genuine hardship, the Government may permit alternative means of disposal. This requirement shall also apply to subsequent alterations under the lease.
- (c) The Lessor will recycle the following items during both the demolition and construction phases of the project, subject to economic evaluation and feasibility:
 - (1) Ceiling grid and tile,
 - (2) Light fixtures, including proper disposal of any transformers, ballasts and fluorescent light bulbs,
 - (3) Duct work and HVAC equipment,
 - (4) Wiring and electrical equipment,
 - (5) Aluminum and/or steel doors and frames,
 - (6) Hardware,
 - (7) Drywall,
 - (8) Steel studs,
 - (9) Carpet, carpet backing, and carpet padding,
 - (10) Wood,
 - (11) Insulation,
 - (12) Cardboard packaging,
 - (13) Pallets,
 - (14) Windows and glazing materials,
 - (15) All miscellaneous metals (as in steel support frames for filing equipment), and
 - (16) All other finish and construction materials.
- (d) If any waste materials encountered during the demolition or construction phase are found to contain lead, asbestos, PCBs (such as fluorescent lamp ballasts), or other harmful substances, they are to be handled and removed in accordance with State and Federal laws and requirements concerning hazardous waste.
- (e) In addition to providing "one-time" removal and recycling of large-scale demolition items such as carpeting or drywall, the Lessor will provide continuous facilities for the recycling of incidental construction waste during initial construction.
- (f) Construction materials recycling records shall be maintained and accessible to the Contracting Officer. Records shall include materials recycled or landfilled, quantity, date, and identification of hazardous wastes.

EXISTING FIT-OUT, SALVAGED, OR RE-USED BUILDING MATERIAL (JUL 2000) [New paragraph]

(MANDATORY PARAGRAPH. MAY BE ALTERED, BUT SHOULD CONTAIN SUBSTANTIALLY THE SAME INFORMATION.)

- (a) Items and material existing in the offered space or to be removed from the offered space during the demolition phase are eligible for reuse in the construction phase of the project. The reuse of items and materials is preferable to recycling them; however, items considered for reuse must be in refurbishable condition, and must meet the quality standards set forth by the Government in this SFO. In the absence of definitive quality standards, the Lessor is to ensure that the quality of the item(s) in question will meet or exceed accepted industry or trade standards for first quality commercial grade applications.
- (b) Lessor shall submit a reuse plan to the Contracting Officer. The Government will not pay for existing fixtures and other Tenant Improvements accepted in place. However, the Government will reimburse the Lessor, as part of the Tenant Improvement allowance, the costs to repair or improve such fixtures or improvements identified on the reuse plan and approved by the Contracting Officer.

INDOOR AIR QUALITY DURING CONSTRUCTION (JUL 2000) [New paragraph]

(MANDATORY PARAGRAPH. MAY BE ALTERED, BUT SHOULD CONTAIN SUBSTANTIALLY THE SAME INFORMATION.)

- (a) The Lessor shall provide to the Government Materials Safety Data Sheets (MSDS) upon request for the following products prior to their installation or use: adhesives, caulking, sealants, insulating materials, fireproofing or firestopping materials, paints, carpets, floor and wall patching or leveling materials, lubricants, clear finish for wood surfaces and janitorial cleaning products.
- (b) The Contracting Officer may eliminate from consideration products with significant quantities of toxic, flammable, corrosive or carcinogenic material and products with potential for harmful chemical emissions. Materials used often or in large quantities will receive the greatest amount of review.
- (c) All MSDSs must comply with OSHA requirements. The Lessor and its agents must comply with all recommended measures in the MSDSs to protect the health and safety of personnel.
- (d) To the greatest extent possible, Lessor shall sequence the installation of finish materials so that materials that will be high emitters of VOCs are installed and allowed to cure before installing interior finish materials, especially soft materials that are woven, fibrous, or porous in nature, that may adsorb contaminants and release them over time.
- (e) Where demolition or construction work occurs adjacent to occupied space, Lessor shall erect appropriate barriers (noise, dust, odor, etc.) and take necessary steps to minimize interference with the occupants. This includes maintaining acceptable temperature, humidity and ventilation in the occupied areas during window removal, window replacement, or similar types of work.
- (f) A final flush-out period of 48 to 72 hours should be provided before occupancy. Lessor shall ventilate with 100 percent outside air at the recommended air change rate (ASHRAE Standard 62) during installation of materials and finishes. If outside air would cause unacceptable inside temperature levels, humidity levels, and/or air quality, an alternate ventilation plan may be submitted to the Contracting Officer for approval.

EXAMPLE 3: ERIE COUNTY, NEW YORK

(PROJECT NAME)
WASTE MANAGEMENT BID SPECIFICATION

PART 1 - PROJECT WASTE MANAGEMENT

1) WASTE MANAGEMENT GOALS FOR THE PROJECT

- A) **(Name)** has established that the *(project name)* shall generate the least amount of waste possible, and processes shall be employed to reduce all waste streams. Measures will be taken to prevent of damage due to mishandling, improper storage, contamination, inadequate protection or other factors as well as, minimizing over packaging and poor quantity estimating.
- B) Inevitably waste will be generated, however, the waste materials designated in this specification shall be salvaged for reuse and or recycling. Consequently, waste disposal in landfills or incinerators will be minimized. On new construction projects, this means careful recycling of job site waste, on demolition projects careful removal of recyclables for salvage is required.

2) CODE OF PRACTICE

- A) Beside other requirements specified herein, the Contractor will participate in the *Erie County Construction and Demolition Debris Recycling Program*, Department of Environment and Planning, 95 Franklin Street, Edward A. Rath Building, Room 1077, Buffalo, New York, 14202. 716/858-4988, or 716/858-6339.

3) WASTE MANAGEMENT PLAN

- A) Prior to any waste removal the Contractor shall submit to the Owner and Consultant a Waste Management Plan. Attached is a sample format together with sample waste generation rates to aid the Contractor in formulating the Plan. The Contractor may use this form or provide a custom form containing the same information. The Plan will contain the following:
 - 1) Analysis of the proposed job site waste to be generated, including the types of recyclable material and waste materials generated (by volume or weight). In the case of demolition, a list of each item proposed for salvage during the course of the project should also be prepared. Refer to the *2000 Erie County Construction and Demolition Debris Recycling Directory* for a list of recycling and salvage companies.
 - 2) Alternatives to Landfilling: The Contractor will designate responsibility for preparing a list of each material proposed to be salvaged, reused, or recycled during the course of the Project.
 - 3) A list of materials that should be considered recyclable, will include, at a minimum the following:
 - a) old corrugated cardboard (OCC);
 - b) clean dimensional wood, pallet wood;
 - c) concrete/brick/concrete block/asphalt;
 - d) scrap metal;
 - e) drywall/sheetrock;
 - f) landclearing debris.

- 4) A list of optional materials to be salvaged (demolition projects only):
 - a) dimensioned lumber and heavy timbers;
 - b) wood siding;
 - c) structural steel;
 - d) wood paneling, molding, trim and wainscoting;
 - e) heritage architectural elements such as mantle pieces, columns, etc.;
 - f) cabinets and casework;
 - g) insulation;
 - h) brick and block;
 - i) electric equipment and light fixtures;
 - j) plumbing fixtures and brass;
 - k) windows, doors and frames; and
 - l) hardwood flooring.
- 5) Meetings: Demolition contractor will conduct Project Waste Management meetings. Meetings will include subcontractors. At a minimum, waste management goals and issues will be discussed at the following meetings:
 - a) pre-bid meeting;
 - b) pre-construction meeting; and
 - c) regular job-site meetings.
- 6) Materials Handling Procedures: prevent contamination of materials to be recycled and salvaged and handle materials consistent with requirements for acceptance by designated recycling/salvage facilities. Where space permits, source separation is recommended. Where materials must be co-mingled, they must be transported to a processing facility for separation off-site (i.e. C&D Processing Facility).
- 7) Transportation: The Contractor may engage a hauling subcontractor, self-haul or require subcontractors to be responsible for their own waste. In any case, compliance with these requirements is mandatory.
- 8) If requested, submit to the Consultant and/or Owner bills, invoices and other documentation confirming that all materials have been hauled to the required locations.
- 9) Waste Management Plan Implementation:
 - a) Manager: The Contractor will designate an on-site party (or parties) responsible for instructing workers and overseeing and recording results of the Waste Management Plan for the project.
 - b) Distribution: The Contractor will distribute copies of the Waste Management Plan to the Job Site Foreman, each Subcontractor, the Owner, and the Consultant.
 - c) Instruction: The Contractor will provide on-site instruction of appropriate separation, handling, and recycling to be used by all parties at the corresponding stages of the Project. On demolition projects the Contractor will provide on-site instructions for salvage and requirements for reusing salvaged materials within the project, either in new construction or in a renovation.
 - d) Separation facilities: The Contractor will designate and label a specific area to facilitate separation of materials for recycling and salvage. Recycling and waste bin areas are to be kept neat and clean and clearly marked to avoid contamination of materials. The requirement for separation will only be waived if the Contractor can demonstrate to the Owner/Consultant that there is insufficient room to accommodate it. If this is the case, the materials must be sent to a processing facility for separation off site.
 - e) Hazardous wastes: Hazardous wastes will be separated, stored, and disposed of in accordance with the requirements of the authorities having jurisdiction.

- 10) Application for Payments: The Contractor will submit with each Application for Payment, a summary of waste materials recycled, salvaged and disposed of by the Project using the form appended to this specification or a form generated by the Contractor containing the same information. Failure to submit this information will render the Application for Payment incomplete and will delay Payment. The Summary will contain the following information:

The amount (in cubic yards or ton) of material landfilled or incinerated from the Project, the identity of the landfill, incinerator and/or transfer station. For each material recycled or salvaged from the Project, include the amount (in cubic yards or tons or in the case of salvaged items state quantities by number of items) and the destination (i.e. the material recovery facility, transfer station, landfill, incinerator or used building materials yard).

Please refer to the enclosed forms “Waste Management Plan for C&D Projects” and “Construction Projects Waste Generation Rates” for forms to help in figuring types of material to be generated and disposal fees vs. recycling fees.

**MANAGEMENT PLAN FOR
CONSTRUCTION AND DEMOLITION PROJECTS**

Name of Company:	Contact Person:	Telephone No.:
Project Site/Location (address if applicable):	Project Type: <input type="checkbox"/> Construction <input type="checkbox"/> Demolition	Project Size (in square feet):

1. Pre-Project		2. Project Updates	
		For Period From:	To:
Material:	Estimated Generation	Recycled/Salvaged/Disposed	Facility

Signature:	Title:	Date:
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Explanatory note:
Column 1 – “Material” – enter materials targeted for recycling and/or salvage and include a category for waste materials requiring disposal
Column 2 – “Estimated Generation” – enter estimated volumes (cu. yd.) or quantities (metric tonnes) of recyclable and waste materials generated and state number of salvageable items.
Column 3 – “Recycled/Salvaged/Disposed” – enter volume (cu. yd.) or quantities (metric tonnes) of materials recycled and disposed, and state number of items salvaged.
Column 4 – “Facility” – enter end destination of recycled, salvaged and disposed materials.

CONSTRUCTION PROJECTS - WASTE GENERATION RATES

	Residential/Commercial High Rise Construction		Institutional Low-Rise Construction		Commercial Low-Rise Construction		Residential Low-Rise Construction	
	Cu. yd./ 1,000 sq. ft.	Tonnes/ 1,000 sq. ft.	Cu. yd./ 1,000 sq. ft.	Tonnes/ 1,000 sq. ft.	Cu. yd./ 1,000 sq. ft.	Tonnes/ 1,000 sq. ft.	Cu. yd./ 1,000 sq. ft.	Tonnes/ 1,000 sq. ft.
wood	3.3	0.40	7.0	0.86	5.6	0.68	6.0	0.73
drywall	3.6	0.92	0.9	0.22	0.02	0.05	1.1	0.27
metal	0.2	0.09	0.4	0.21	--	--	--	--
concrete/ asphalt	1.7	1.79	0.7	0.99	--	--	0.04	0.05
corrugated cardboard	--	--	--	--	7.1	0.14	2.4	0.05
other	5.6	1.54	0.2	0.54	1.0	0.27	0.5	0.14
total	14.4	4.74	9.2	2.82	13.9	1.14	10.04	1.24

Explanatory note:

Waste generation rates vary depending on the project type and size, sub-trade efficiency, accurate material estimation, on-site materials storage procedures and product packaging.

Estimate the volumes or quantities of materials generated on the site by multiplying the floor area of your project with the generation rates listed for the different materials.