

NASA - John F. Kennedy Space Center

Affirmative Procurement Plan

Prepared by

**Kennedy Space Center
Environmental Program Branch**

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KENNEDY SPACE CENTER AFFIRMATIVE PROCUREMENT PROGRAM

I. PURPOSE:

Section 6002 of the Resources Conservation and Recovery Act (RCRA) and Executive Order 13101 “*Greening the Government Through Waste Prevention, Recycling, and Federal Acquisition*,” direct federal agencies to purchase recycled content products whenever possible. In response to the RCRA and the Executive Order, U.S. Environmental Protection Agency developed the Comprehensive Procurement Guideline (CPG). The CPG designates recycled products in eight product categories for which federal procuring agencies need to develop their affirmative procurement programs. The eight product categories are: 1) Paper and paper products, 2) Vehicular products, 3) Construction products, 4) Landscaping products, 5) Transportation products, 6) Park and recreation products, 7) Non-paper products, and 8) Miscellaneous.

In response to the above requirements, NASA developed document “*NPR 8530.1A, Affirmative Procurement Program and Plan for Environmentally Preferable Products*”. Document was developed, cooperatively, a by team of environmental program and procurement office representatives from each of the NASA Centers and NASA Headquarters. This document was created to provide a consistent set of terms and definitions and to set an Agency-wide direction. Each NASA Center and Component Facility is unique in character and function. Therefore, this document is not intended to direct implementation methods, which will vary according to circumstance, but to be the floor upon which they are built and point to other resources and tools for the successful integration and implementation of Affirmative Procurement at the Center, Component Facilities.

II. RESPONSIBILITY:

The Center Operations Directorate (TA) is responsible for establishment of an Affirmative Procurement Program and the appointment of an Affirmative Procurement Program Manager to initiate and coordinate the Affirmative Procurement Program across all KSC organizations. The Affirmative Procurement Program Manager exists within the Environmental Program Branch (TA-C3) of the Medical and Environmental Division (TA-C). The Affirmative Procurement Program Manager will administer the Affirmative Procurement Program as require in the NPR 8530.1A, *Affirmative Procurement Program and Plan for Environmentally Preferable Products*.

The Affirmative Procurement Program Manager is responsible for: 1) implementing an awareness program to promote Affirmative Procurement through a working group such as the Environmental Working Group or the Affirmative Procurement Working Group, 2) advising the request originators and contracting officers on acquisition strategies for environmentally preferable products and services, including any updates to the list of EPA’s designated items, 3) providing the request originators and the Contracting Officers with the EPA designated list of guideline items, 4) reviewing and approving the Request for Waiver documentation (if required) and participating in Life Cycle Cost and Life Cycle Analysis (LCC and LCA) activities as appropriate, and 5) compiling the Center’s annual Affirmative Procurement report to the Agency Environmental Executive.

The Affirmative Procurement Working Group will be chartered under the Chief of the Medical and Environmental Division and chaired by the Affirmative Procurement Program Manager. Membership consists of appointed representatives from each KSC organization and their contractors. Each member of the working group is responsible for establishing organizational controls and procedures necessary to provide compliance with the provisions of the Affirmative Procurement Program.

Contracting Officers, in consultation with the Affirmative Procurement Program Manager and the request originator are responsible for: 1) providing guidance and facilitating acquisition planning with respect to environmentally preferable goods and services, including those available through federal sources of supply, 2) assisting in any market research necessary to determine the availability of environmentally preferable goods and services, 3) ensuring that solicitations and contracts contain the appropriate provisions and FAR clauses to implement Affirmative Procurement.

III. SCOPE:

The Affirmative Procurement Program Manager will provide information and documents to the Affirmative Procurement Working Group at the meeting. Information and documents will include the NPR 8830 and a list of the eight EPA's designated products categories and their possible sources.

The Affirmative Procurement Program Manager will work closely with the KSC Procurement Office and Contracting Officers to provide language requirements for modifying existing contracts and create requirements for new contracts.

It is incumbent on the request originator to insure that the goods or services being procured either comply with the EPA's designated list of guideline items, or as appropriate promotes the use of environmentally preferable products or services. If there are none, or if the product suggests a waiver may be in order, follow the **Request for Waiver** Process in Section 3.2.3 of NPR 8530.1A. The process may involve market research to ascertain the availability of an environmentally sound product or service that meets Center needs or a more detailed analysis of the environmental performance of a product or service; such as life cycle cost analysis. The level of review and documentation is dependent upon a variety of factors commensurate with the product or services intended use.

IV. DATA REPORTING:

The annual RCRA Section 6002 data for KSC Affirmative Procurement Program are reported in the NASA Environmental Tracking System (NETS) by the end of February every year. NETS is an automated application and database supporting: a) Mandatory NASA agency environmental reporting; b) NASA Agency wide performance metrics; and c) Environmental Functional Management.

Designated KSC employees who need to input the annual KSC Affirmative Procurement data into NETS are required to have a USER ID and Password to access the NETS system. Those designated employees should also be familiar with the NETS Guide: Recycling and Affirmative Procurement. Below are the CPG items that were purchased by KSC in 2005:

KSC AP - CPG Items For CY 2005

	Total Quantity Purchased	Quantity Purchased with Recovered Material Content	Units	Total Amount Purchased	Amount Purchased Containing Recovered Materials
Kennedy Space Center	5,648,504	5,648,504		\$334,473	\$334,473
Paper and Paper Products	5,648,504	5,648,504	n/a	\$334,473	\$334,473
KSC Base Operations	77,924	47,361		\$1,584,758	\$1,177,352
Binders (chipboard and plastic covered, not cloth)	8,169	1,625	n/a	\$37,456	\$4,973
Building Insulation Products	5	5	n/a	\$172	\$172
Carpet (low and medium wear polyester fiber only)	1,817	1,817	n/a	\$207,077	\$207,077
Cement	1,042	843	cubic yds	\$5,182	\$3,399
Commercial Sanitary Tissue Products	4,149	4,149	each	\$106,243	\$106,243
Concrete	2,919	1,999	cubic yds	\$306,495	\$209,895
Engine Coolants	183	0	gals	\$1,523	\$0
Industrial Drums	1,099	1,099	n/a	\$43,131	\$43,131
Latex Paints	0	0	n/a	\$0	\$0
Motor Vehicle Tires	0	0	units	\$0	\$0
Office Furniture	131	0	each	\$61,559	\$0
Office R/ W Containers (plastic, paper or steel)	108	2	n/a	\$793	\$111
Pallet	40	0	each	\$420	\$0
Paper and Paper Products	51,528	32,201	n/a	\$577,488	\$455,269
Plastic Clipboards	21	14	each	\$85	\$59
Plastic Desktop Accessories	898	335	n/a	\$10,040	\$3,313
Plastic File Folders	71	0	each	\$557	\$0
Plastic Trash Bags	1,343	1,230	n/a	\$27,403	\$25,145
Re-Refined Oil	2,533	693	gals	\$22,676	\$1,738
Sorbents (Adsorbents and Absorbents)	153	83	n/a	\$4,205	\$1,064
Toner Cartridges	1,685	1,236	each	\$169,588	\$113,098
Traffic Cone	30	30	each	\$2,665	\$2,665
KSC Payloads/Station Program	25	0		\$322,602	\$280,765
Carpet (low and medium wear polyester fiber only)	0	0	n/a	\$4,300	\$4,300
Industrial Drums	0	0	n/a	\$9,908	\$8,879
Motor Vehicle Tires	25	0	units	\$4,111	\$0
Paper and Paper Products	0	0	n/a	\$192,144	\$166,218
Plastic File Folders	0	0	each	\$22,483	\$22,483
Plastic Trash Bags	0	0	n/a	\$13,422	\$12,413
Re-Refined Oil	0	0	gals	\$4,733	\$3,727
Toner Cartridges	0	0	each	\$71,502	\$62,745
KSC Shuttle Program	63,743	48,391		\$908,438	\$497,869
Binders (chipboard and plastic covered, not cloth)	0	0	n/a	\$3,805	\$3,762
Commercial Sanitary Tissue Products	27,000	27,000	each	\$477	\$477
Concrete	7	7	cubic yds	\$940	\$940
Engine Coolants	318	0	gals	\$2,874	\$0
Industrial Drums	1,909	1,909	n/a	\$51,583	\$51,583
Latex Paints	196	196	n/a	\$3,055	\$3,055
Motor Vehicle Tires	1	0	units	\$605	\$0
Pallet	3,528	0	each	\$57,682	\$0
Paper and Paper Products	0	0	n/a	\$362,032	\$309,960

Plastic Desktop Accessories	0	0	n/a	\$421	\$210
Plastic Trash Bags	15,000	15,000	n/a	\$3,476	\$3,476
Re-Refined Oil	4,109	0	gals	\$41,190	\$0
Sorbents (Adsorbents and Absorbents)	7,980	1,920	n/a	\$9,481	\$5,360
Strapping	60	60	n/a	\$1,104	\$1,104
Toner Cartridges	3,635	2,299	each	\$369,712	\$117,942
Traffic Barricades	0	0	each	\$0	\$0
KSC Visitor Center	27,899	8,495		\$513,961	\$216,798
Binders (chipboard and plastic covered, not cloth)	0	110	n/a	\$0	\$801
Commercial Sanitary Tissue Products	1,635	1,541	each	\$74,567	\$72,685
Concrete	2,100	0	cubic yds	\$0	\$0
Floor Tiles (rubber or plastic only)	18,810	0	n/a	\$0	\$0
Motor Vehicle Tires	242	82	units	\$51,437	\$13,427
Office Furniture	0	43	each	\$0	\$13,016
Office R/ W Containers (plastic, paper or steel)	0	31	n/a	\$0	\$1,309
Paper and Paper Products	0	2,224	n/a	\$132,468	\$55,600
Park Benches and Picnic Tables	25	25	each	\$16,250	\$16,250
Plastic Clipboards	71	71	each	\$0	\$314
Plastic Desktop Accessories	0	129	n/a	\$0	\$2,337
Plastic File Folders	0	3,200	each	\$0	\$0
Plastic Trash Bags	984	984	n/a	\$13,007	\$13,007
Signage	15	15	each	\$25,378	\$25,378
Sorbents (Adsorbents and Absorbents)	800	0	n/a	\$112	\$0
Toner Cartridges	3,157	40	each	\$200,142	\$2,674
Traffic Cone	60	0	each	\$600	\$0

Construction Products from 2004 Comprehensive Procurement Guidelines

2004 CPG - CONSTRUCTION PRODUCTS	MATERIAL RECOVERED	POSTCONSUMER RECOVERED CONTENT	TOTAL RECOVERED CONTENT
Rock Wool Insulation ¹	Slag	—	75%
Fiberglass Insulation ¹	Glass Cullet	—	20-25%
Cellulose Insulation (loose-fill and spray-on) ¹	Postconsumer Paper	75%	75%
Perlite Composite Board Insulation ¹	Postconsumer Paper	23%	23%
Plastic, Non-woven Batt Recovered and/or Insulation	Postconsumer Plastics	—	100%
Plastic Rigid Foam, Polyisocyanurate/ Polyurethane: Rigid Foam Insulation ¹	Recovered Material	—	9%
Foam-in-Place Insulation ¹	Recovered Material	—	5%
Glass Fiber Reinforced Insulation ¹	Recovered Material	—	6%
Phenolic Rigid Foam Insulation ¹	Recovered Material	—	5%
Structural Fiberboard ¹	Recovered Material	—	80-100%
Laminated Paperboard ¹	Postconsumer Paper	100%	100%
Cement and Concrete ²	Coal Fly Ash Ground Granulated Blast Furnace Slag (GGBF Slag) Cenospheres Silica Fume	See Endnote 2 See Endnote 2	See Endnote 2 See Endnote 2 Minimum of 10% (by volume) 5-10% of cementitious material (dry weight basis)
Polyester Carpet Fiber ^{1,3}	Polyethylene Terephthalate (PET) Resin	25-100%	25-100%
Patio Blocks ¹	Rubber or Rubber Blends Plastic or Plastic Blends	90-100% —	— 90-100%
Floor Tiles (Heavy Duty/Commercial Use) ¹	Rubber Plastic	90-100% —	— 90-100%
Shower and Restroom Dividers/ Partitions ¹	Plastic Steel ⁴	20-100% 16% 67%	20-100% 25-30% 100%
Latex Paint: ¹ - Consolidated ⁵ - Reprocessed ⁶ - White, Off-White Pastel Colors - Grey, Brown, Earthtones, and Other Dark Colors	Recovered Material Recovered Material Recovered Material	100% 20% 50-99%	100% 20% 50-99%
Carpet Cushion ¹ : - Bonded Polyurethane - Jute - Synthetic Fibers - Rubber	Old Carpet Cushion Burlap Carpet Fabrication Scrap Tire Rubber	15-50% 40% — 60-90%	15-50% 40% 100% 60-90%
Flowable Fill Containing Coal Fly Ash and/or Ferrous Foundry Sands ⁷	Coal Fly Ash Ferrous Foundry Sands	See Endnote 7	See Endnote 7
Railroad Grade Crossing Surfaces:			

- Concrete	Coal Fly Ash ⁸	—	15-20%
- Rubber ⁹	Tire Rubber	—	85-95%
- Steel ⁴	Steel4	16%	25-30%
		67%	100%
- Wood ¹⁰	Wood or Wood Composite	90-97%	90-97%
- Plastic ¹¹	Plastic or Plastic Composite	85-95%	100%
Modular Threshold Ramps	Steel ¹²	16-67%	25-100%
	Aluminum	—	10%
	Rubber	100%	100%
Nonpressure Pipe	Steel ⁴	16%	25-30%
		67%	100%
	Plastic		
	- HDPE	100%	100%
	- PVC	5-15%	25-100%
	Cement	See Endnote 2	See Endnote 2
Roofing Materials	Steel4	16%	25-30%
		67%	100%
	Aluminum	20-95%	20-95%
	Fiber (felt) or Fiber Composite	50-100%	50-100%
	Rubber	12-100%	100%
	Plastic or Plastic/ Rubber	100%	100%
	Composite	—	100%
	Wood/Plastic Composite	—	100%
	Cement	See Endnote 2	See Endnote 2

¹ EPA's recommendations do not preclude procuring agencies from purchasing construction products manufactured using other materials. EPA simply recommends that procuring agencies, when purchasing construction products designated in the procurement guidelines, purchase these products containing recovered materials.

² EPA recommends that procuring agencies prepare or revise their procurement programs for cement and concrete or for construction projects involving cement and concrete to allow the use of coal fly ash, ground granulated blast furnace slag (GGBF slag), cenospheres, or silica fume, as appropriate. EPA does not recommend that procuring agencies favor one recovered material over the other. Rather, EPA recommends that procuring agencies consider the use of all of these recovered materials and choose the one (or the mixture of them) that meets their performance requirements, consistent with availability and price considerations. EPA also recommends that procuring agencies specifically include provisions in all construction contracts to allow for the use, as optional or alternate materials, of cement or concrete which contains coal fly ash, GGBF slag, cenospheres, or silica fume, where appropriate. Due to variations in cement, strength requirements, costs, and construction practices, EPA is not recommending recovered materials content levels for cement or concrete containing coal fly ash, GGBF slag, cenospheres, or silica fume. Additional information can be found in the Consolidated Recovered Materials Advisory Notice (RMAN) at www.epa.gov/cpg/pdf/rmanal4.pdf.

³ EPA recommends that procuring agencies establish minimum content standards for use in purchasing polyester carpet for moderate-wear applications. This recommendation does not include polyester carpet for use in heavy- or severe-wear applications.

⁴ The recommended recovered materials content level for steel in this table reflect the fact that the designated items can be made from steel manufactured from either a Basic Oxygen Furnace (BOF) or an Electric Arc Furnace (EAF). Steel from the BOF process contains 25-30% total recovered materials, of which 16% is postconsumer steel. Steel from the EAF process contains a total of 100% recovered steel, of which 67% is postconsumer.

⁵ Consolidated latex paint used for covering graffiti, where color and consistency of performance are not primary concerns.

⁶ Reprocessed latex paint used for interior and exterior architectural applications such as wallboard, ceilings, and trim; gutterboards; and concrete, stucco, masonry, wood, and metal surfaces.

⁷ EPA recommends that procuring agencies use flowable fill containing coal fly ash and/or ferrous foundry sands for backfill and other fill applications. EPA further recommends that procuring agencies include provisions in all construction contracts involving backfill or other fill applications to allow for the use of flowable fill containing coal fly ash and/or ferrous foundry sands, where appropriate. The specific percentage of coal fly ash or ferrous foundry sands used in flowable fill depends on the specifics of the job, including the type of coal fly ash used (Class C or Class F); the strength, set time, and flowability needed; and bleeding and shrinkage. Therefore, EPA is not recommending specific coal fly ash or ferrous foundry sands content levels for procuring agencies to use in establishing minimum content standards for flowable fill. However additional information regarding typical proportions used in flowable fills, as well as specifications and recommended test methods are provided by EPA and can be found in the Consolidated Recovered Materials Advisory Notice (RMAN) for the Comprehensive Procurement Guideline (CPG). An electronic version of this document can be viewed at www.epa.gov/cpg/pdf/rmanal4.pdf.

⁸ Coal fly ash can be used as an ingredient of concrete slabs, pavements, or controlled density fill product, depending on the type of concrete crossing system installed. Higher percentages of coal fly ash can be used in the concrete mixture; the higher percentages help to produce a more workable and durable product but can prolong the curing process.

⁹ The recommended recovered materials content levels for rubber railroad grade crossing surfaces are based on the weight of the raw materials, exclusive of any additives such as binders or other additives.

¹⁰ Railroad grade crossing surfaces made from recovered wood may also contain other recovered materials such as plastics. The percentages of these materials contained in the product would also count toward the recovered materials content level of the item.

¹¹ Railroad grade crossing surfaces made from recovered plastics may also contain other recovered materials such as auto shredder residue, which contains a mix of materials. The percentages of these materials contained in the product would also count toward the recovered materials content level of the item.

¹² The recommended recovered materials content levels for steel in this table reflect the fact that the designated item may contain steel manufactured in either a Basic Oxygen Furnace (BOF) or an Electric Arc Furnace (EAF), or a combination of both. Steel from the BOF process contains 25% - 30% total recovered steel, of which 16% is postconsumer. Steel from the EAF process contains 100% total recovered steel, of which 67% is postconsumer. According to industry sources, modular threshold ramps containing a combination of BOF and EAF steel would contain 25% - 85% total recovered steel, of which 16% - 67% would be postconsumer. Since there is no way of knowing which type of steel was used in the manufacture of the item, the postconsumer and total recovered material content ranges in this table encompass the whole range of possibilities, i.e., the use of EAF steel only, BOF steel only, or a combination of the two.

Park & Recreation Products from 2004 Comprehensive Product Guidelines

2004 CPG - PARK & RECREATION PRODUCTS ¹	MATERIAL	POSTCONSUMER RECOVERED CONTENT ²	TOTAL RECOVERED CONTENT ²
Park Benches & Picnic Tables:	Plastic ³	90-100%	100%
	Plastic Composites	50-100%	100%
	Aluminum	25%	—
	Concrete	—	15-40%
	Steel ⁴	16%	25-30%
Plastic Fencing for Specified Uses ⁵	Plastic	60-100%	90-100%
Playground Equipment	Plastic ³	90-100%	100%
	Plastic Composites	50-75%	95-100%
	Steel ⁴	16%	25-30%
		67%	100%
Playground Surfaces	Plastic or Rubber	90-100%	—
Running Tracks	Plastic or Rubber	90-100%	—

1 EPA's recommendations do not preclude a procuring agency from purchasing these items manufactured from another material. They simply require that a procuring agency purchase these items made with recovered materials when these items meet applicable specifications and performance requirements. Federal agency installations of these products must comply with applicable state or local construction codes, as well as standards set by the Consumer Safety Commission and the Americans with Disabilities Act.

2 The recommended recovered materials content levels are based on the dry weight of the raw materials, exclusive of any additives such as adhesives, binders, or coloring agents.

3 "Plastic" includes both single and mixed plastic resins. Park benches and picnic tables made with recovered plastic may also contain other recovered materials, such as sawdust, wood, or fiberglass. The percentage of these materials contained in the product would also count toward the recovered materials content level of the item.

4 The recommended recovered materials content level for steel in this table reflect the fact that the designated items can be made from steel manufactured from either a Basic Oxygen Furnace (BOF) or an Electric Arc Furnace (EAF). Steel from the BOF process contains 25-30% total recovered materials, of which 16% is postconsumer steel. Steel from the EAF process contains a total of 100% recovered steel, of which 67% is postconsumer.

5 Designation includes fencing containing recovered plastic for use in controlling snow or sand drifting and as a warning/safety barrier in construction or other applications.

Landscaping Products from 2004 Comprehensive Procurement Guidelines

2004 CPG - LANDSCAPING PRODUCTS ¹	MATERIAL RECOVERED	POSTCONSUMER RECOVERED CONTENT	TOTAL RECOVERED CONTENT
Hydraulic Mulch	Paper Wood/Paper	100% —	— 100%
Compost	Yard Trimmings and/or Food Waste	See Endnote 2	See Endnote 2
Garden Hose Soaker Hose	Rubber and/or Plastic Rubber and/or Plastic	60-65% 60-70%	— —
Lawn and Garden Edging	Rubber and/or Plastic	30-100%	30-100%
Landscaping Timbers and Posts	HDPE	25-50%	75-100%
	Mixed Plastic/Sawdust	50%	100%
	HDPE/Fiberglass	75%	95%
	Other Mixed Resins	50-100%	95-100%

¹ EPA's recommendations do not preclude procuring agencies from purchasing landscaping products manufactured using other materials. EPA simply recommends procuring agencies, when purchasing landscaping products designated in the procurement guidelines, purchase these products containing recovered materials.

² Purchase or use compost made from yard trimmings, leaves, grass clippings, and/or food wastes for applications such as landscaping, seeding of grass or other plants, as nutritious mulch under trees and shrubs, and in erosion control and soil reclamation. EPA further recommends implementing a composting system for these materials when agencies have an adequate volume and sufficient space.

Vehicular Products from 2004 Comprehensive Procurement Guidelines

2004 CPG - VEHICULAR PRODUCTS	RECOMMENDATIONS
Re-Refined Oil	Use 25% or more re-refined oil base stock for engine lubricating oils, hydraulic fluids, and gear oils.
Retread Tires	<p>Procurement of tire retreading services for the agencies' used tire casings: EPA recommends that procuring agencies specify that tire repair and retread services must conform to Federal Specification ZZ-T-441H (or current version).</p> <p>Procurement of tires through competition between vendors of new tires and vendors of retread tires: EPA recommends that procuring agencies specify that retread tires must meet the requirements of Federal Specification ZZ-T-381, "Tires, Pneumatic, Vehicular (Highway) (New and Retreaded)."</p>
Engine Coolant	Reclaim engine coolants on site or contract for offsite reclamation services. Also request reclaimed engine coolant when having vehicles serviced at commercial service centers and buy it when making direct purchases.
Rebuilt Vehicular Parts	EPA recommends that procuring agencies whose vehicles (passenger vehicles as well as medium- and heavy-duty equipment, including trucks, cranes, off-road vehicles, and military vehicles) are serviced by a motor pool or vehicle maintenance facility establish a service contract to require the use of rebuilt vehicular parts in the agencies' vehicles or establish a program for vehicular parts rebuilding and reuse consisting of either recovering a used vehicular part and rebuilding it, replacing it with a rebuilt part, or contracting to have the part replaced with a rebuilt part. This designation applies to vehicles served by both on-site and commercial facilities.

Nonpaper Products from 2004 Comprehensive Procurement Guidelines

2004 CPG - NONPAPER OFFICE PRODUCTS	MATERIAL RECOVERED	POSTCONSUMER RECOVERED CONTENT	TOTAL RECOVERED CONTENT
Recycling Containers and Waste Receptacles ¹	Plastic	20-100%	—
	Steel ²	16%	25-30%
	Paper		
	– Corrugated	25-50%	25-50%
	– Solid Fiber Boxes	40%	—
	– Industrial Paperboard	40-80%	100%
Desktop Accessories including desk organizers, sorters, trays and memo, note, and pencil holders ¹	Plastic (polystyrene)	25-80%	—
Binders ¹	Plastic-Covered	—	25-50%
	Paper-Covered	75-100%	90-100%
	Pressboard	20%	50%
	Solid Plastic		
	– HDPE	90%	90%
	– PE	30-50%	30-50%
	– PET	100%	100%
	– Misc. Plastics	80%	80%
Trash Bags ¹	Plastic	10-100%	—
Toner Cartridges ^{1,3}	See Endnote 3	See Endnote 3	See Endnote 3
Printer Ribbons ^{1,4}	See Endnote 4	See Endnote 4	See Endnote 4
Plastic Envelopes ¹	Plastic	25%	25-30%
Plastic Clipboards ¹	HDPE	90%	90%
	PS	50%	50%
	Miscellaneous Plastic	15%	15-80%
Plastic File Folders ¹	HDPE	90%	90%
Plastic Clip Portfolios ¹	HDPE	90%	90%
Plastic Presentation Folders ¹	HDPE	90%	90%
Office Furniture	Furniture Structure		
	– Steel ²	16%	25-30%
	– Aluminum	—	75-100%
	Particleboard/Fiberboard Component ⁵		
	– Wood or Wood Composite	Greater than 0%	80-100%
	– Agricultural Fiber	—	100%
	Fabric		
	– PET	100%	100%
Plastic Furniture Component			
– HDPE	70-75%	95%	
Remanufactured or Refurbished Furniture			
– Various	25-75%	25-75%	

¹ EPA's recommendations do not preclude procuring agencies from purchasing nonpaper office products made from the materials manufactured using other materials, such as wood or cloth. EPA simply recommends that procuring agencies, when purchasing nonpaper office products made from the materials designated in the procurement guidelines, purchase these products containing recovered materials.

² The recommended recovered materials content levels for steel in this table reflect the fact that the designated item is generally made from steel manufactured in a Basic Oxygen Furnace (BOF). Steel from the BOF process contains 25-30% total recovered materials, of which 16% is postconsumer steel.

³ EPA recommends the return of used toner cartridges for remanufacturing and reuse or purchase a remanufactured or recycled-content replacement cartridge.

⁴ EPA recommends the procurement of printer ribbon re-inking or reloading services, or of re-inked or reloaded printer ribbons.

⁵ Particleboard and fiberboard used in the wood components of office furniture may also contain other recovered cellulosic materials, including, but not limited to, paper, wheat straw, and bagasse. The percentages of these materials contained in the product would also count toward the recovered materials content level of the item. In addition, while EPA has no evidence or indication that wood treated with chromated copper arsenate (CCA) is currently used in office furniture, EPA is not recommending the use of CCA-treated wood as a recovered material in office furniture. The arsenic in CCA is a known human carcinogen and EPA is currently conducting a thorough and comprehensive risk assessment of CCA as a part of the pesticide re-registration process for CCA. In addition, EPA is conducting a risk assessment for children who contact CCA treated wood playsets and decks.

Transportation Products from 2004 Comprehensive Procurement Guidelines

2004 CPG - TRANSPORTATION PRODUCTS ²	MATERIAL RECOVERED	POSTCONSUMER RECOVERED CONTENT ³	TOTAL RECOVERED CONTENT ³
Traffic Cones	Plastic (PVC and LDPE)	—	50-100%
	Crump Rubber	—	50-100%
Traffic Barricades (type I and II only)	Plastic (HDPE, LDPE, PET)	80-100%	100%
	Steel ⁴	16%	25-30%
	Fiberglass	67%	100%
Parking Stops	Plastic and/or Rubber	—	100%
	Concrete Containing Coal Fly Ash	Generally, 20-30%, but could be up to 40%. When used as a partial cement replacement as an admixture in concrete, 15%.	
	Concrete Containing Ground Granulated Blast Furnace Slag	—	25-70%
Traffic Control Devices: Channelizers	Plastic	25-90%	—
	Rubber (base only)	100%	—
Delineators	Plastic	25-90%	—
	Rubber (base only)	100%	—
	Steel (base only) ⁴	16%	25-30%
		67%	100%
Flexible Delineators and II only	Plastic (PET)	25-85%	—

Transportation products containing recovered materials must conform to the Manual on Uniform Highway Traffic Control Devices used by the Federal Highway Administration, as well as other applicable federal requirements and specifications.

² EPA's recommendations do not preclude procuring agencies from purchasing transportation products manufactured using other materials. EPA simply recommends that procuring agencies, when purchasing transportation products designated in the procurement guidelines, purchase these products containing recovered materials.

³ Content levels are based on the dry weight of the raw materials, exclusive of any additives such as adhesives, binders, or coloring agents.

⁴ The recommended recovered materials content level for steel in this table reflect the fact that the designated items can be made from steel manufactured from either a Basic Oxygen Furnace (BOF) or an Electric Arc Furnace (EAF). Steel from the BOF process contains 25-30% total recovered materials, of which 16% is postconsumer steel. Steel from the EAF process contains a total of 100% recovered steel, of which 67% is postconsumer.

Paper Products from 2004 Comprehensive Procurement Guidelines

2004 CPG – PAPER PRODUCTS	NOTES	POSTCONSUMER RECOVERED FIBER	TOTAL RECOVERED FIBER
Printing and Writing Papers			
Reprographic	Business papers such as bond, electrostatic, copy, mimeo, duplicator, and reproduction	30%	30%
Offset	Used for book publishing, commercial printing direct mail, technical documents, and manuals	30%	30%
Tablet	Office paper such as note pads and notebooks	30%	30%
Forms Bond	Bond type papers used for business forms such as continuous, cash register, sales book, unit sets, and computer printout, excluding carbonless	30%	30%
Envelope	Wove Kraft, white, and colored (including manilla) Kraft, unbleached Excludes custom envelopes	30% 10-20% 10%	30% 10-20% 10%
Cotton Fiber	High-quality papers used for stationary, invitations, currency, ledgers, maps, and other specialty items	30%	30%
Text and Cover	Premium papers used for cover stock, books and stationary and matching envelopes	30%	30%
Supercalendered	Groundwood paper used for advertising and mail order inserts, catalogs, and some magazines	10%	10%
Machine Finished Groundwood	Groundwood paper used in magazines and catalogs	10%	10%
Papeteries	Used for invitations and greeting cards	30%	30%
Check Safety	Used in the manufacture of commercial and government checks	10%	10%
Coated	Used for annual reports, posters, brochures, and magazines. Have gloss, dull, or matte finishes	10%	10%
Carbonless	Used for multiple-impact copy forms	30%	30%
File Folders	Manilla or colored	30%	30%
Dyed Filing Products	Used for multicolored hanging folders and wallet files	20%	20-50%
Index and Card Stock	Used for index cards and postcards	20%	50%
Pressboard	High-strength paperboard used in binders and report covers	50%	20%
Tags and Tickets	Used for toll and lottery tickets, licenses, and identification and tabulating cards	20%	20-50%
Newsprint			
Newsprint	Groundwood paper used in newspapers	20-85%	20-100%
Commercial Sanitary Tissue Products			
Bathroom Tissue	Used in rolls or sheets	20-60%	20-100%
Paper Towels	Used rolls or sheets	40-60%	40-100%
Paper Napkins	Used in food service applications	30-60%	30-100%
Facial Tissue	Used for personal care	10-15%	10-100%
General-purpose Industrial Wipers	Used in cleaning and wiping applications	40%	40-100%
Paperboard and Packaging Products			
Corrugated Containers	Used for packaging and shipping a variety of goods		
	(<300 psi)	25-50%	25-50%
	(300 psi)	25-30%	25-30%
Solid Fiber Boxes	Used for specialized packaging needs such dynamite packaging and army ration boxes	40%	40%
Folding Cartons	Used to package a wide variety of foods, household	40-80%	100%

	products, cosmetics, pharmaceuticals, detergent, and hardware		
Industrial Paperboard	Used to create tubes, cores, cans, and drums	45-100%	100%
Miscellaneous	Includes "chipboard" pad backings, book covers covered binders, mailing tubes, game boards, and puzzles	75-100%	90-100%
Padded Mailers	Made from Kraft paper that is usually brown but can be bleached white	5-15%	5-15%
Carrierboard	A type of folding carton designed for multipack beverage cartons	10-15%	10-100%
Brown Papers	Used for bags and wrapping paper	5-20%	5-40%
Miscellaneous Paper Products			
Tray Liners	Used to line food service trays. Often contain printed information	50-75%	100%

Miscellaneous Products from 2004 Comprehensive Procurement Guidelines

2004 CPG - MISCELLANEOUS PRODUCTS	MATERIAL RECOVERED	POSTCONSUMER RECOVERED CONTENT	TOTAL RECOVERED CONTENT
Awards and Plaques ¹	Glass Wood Paper Plastic and Plastic/Wood Composite	75-100% — 40-100% 50-100%	100% 100% — 95-100%
Industrial Drums ¹	Steel ² Plastic (HDPE) Fiber (paper)	16% 30-100% 100%	25-35% — —
Mats ¹	Rubber Plastic Rubber/Plastic Composite	75-100% 10-100% 100%	85-100% 100% —
Pallets ¹	Wood Plastic Thermoformed Paperboard	95-100% 100% 25-50% 50%	— — — —
Signage ¹	Plastic ³ Aluminum Plastic Sign Posts/Supports ³ Steel Sign Posts/Supports ⁴	80-100% 25% 80-100% 16% 67%	— — — 25-30% 100%
Sorbents ¹	Paper Textiles Plastics Wood ⁵ Other Organics/Multimaterials ⁶	90-100% 95-100% — — —	100% — 25-100% 100% 100%
Manual-Grade Strapping ¹	Polyester Polypropylene Steel ⁴	50-85% — 16% 67%	— 10-40% 25-30% 100%
Bike Racks	Steel ² Plastic (HDPE)	16% 100%	25-30% 100%
Blasting Grit	Steel ⁷ Coal Slag Copper and Nickel Slag Bottom Ash Glass	16-67% — — — 100%	25-100% 100% 100% 100% 100%

	Glass/Plastic	20%	100%
	Fused Alumina Oxide	100%	100%
	Walnut Shells	—	100%

¹ EPA's recommendations do not preclude procuring agencies from purchasing miscellaneous products manufactured using other materials. EPA simply recommends that procuring agencies, when purchasing miscellaneous products designated in the procurement guidelines, purchase these products containing recovered materials.

² The recommended recovered materials content levels for steel in this table reflect the fact that the designated item is generally made from steel manufactured in a Basic Oxygen Furnace (BOF). Steel from the BOF process contains 25% - 30% total recovered steel, of which, 16% is postconsumer steel.

³ Plastic signs and sign posts are recommended for nonroad applications only, such as, but not limited to, trailway signs in parks and directional/informational signs in buildings.

⁴ The recommended recovered materials content level for steel in this table reflect the fact that the designated items can be made from steel manufactured from either a Basic Oxygen Furnace (BOF) or an Electric Arc Furnace (EAF). Steel from the BOF process contains 25-30% total recovered materials, of which 16% is postconsumer steel. Steel from the EAF process contains a total of 100% recovered steel, of which 67% is postconsumer.

⁵ "Wood" includes materials such as sawdust and lumber mill trimmings.

⁶ Examples of other organics include, but are not limited to, peanut hulls and corn Stover. An example of multimaterial sorbents would include, but not be limited to, polymer and cellulose fiber combination.

⁷ The recommended recovered materials content levels for steel in this table reflect the fact that the designated item may contain steel manufactured in either a Basic Oxygen Furnace (BOF) or an Electric Arc Furnace (EAF), or a combination of both. Steel from the BOF process contains 25% - 30% total recovered steel, of which 16% is postconsumer. Steel from the EAF process contains 100% total recovered steel, of which 67% is postconsumer. According to industry sources, blasting grit containing a combination of BOF and EAF steel would contain 25% - 85% total recovered steel, of which 16% - 67% would be postconsumer. Since there is no way of knowing which type of steel was used in the manufacture of the item, the postconsumer and total recovered material content ranges in this table encompass the whole range of possibilities, i.e., the use of EAF steel only, BOF steel only, or a combination of the two.

COMPREHENSIVE PROCUREMENT GUIDELINES (CPG) NOTIFICATION AND REQUEST FOR WAIVER FORM

This form must accompany all purchases. Request Originator will complete this form by checking the appropriate box(es) and attaching additional sheets as necessary. Please call the Environmental Program Branch Office at 867-8421 for additional assistance.

- My item(s) is **not required** by the CPG to contain recycled/recovered content. (Items which must contain recycled/recovered material can be found at <http://www.epa.gov/cpg>)
- My item(s) **contains** recovered materials as listed at <http://www.epa.gov/cpg>.

(List items here. Use extra sheets as necessary)

- My item(s) is **on the CPG list, but cannot be purchased** with the required recycled/recovered material content

_____ because:
(List item here. Use extra sheets as necessary)

- Item is not available competitively from two or more sources.
- Item meeting EPA guidelines is only available at an unreasonable price (greater than 10 percent higher).
- Item meeting EPA guidelines does not meet quality/performance specifications.
- Item meeting EPA guidelines is not available within a reasonable time frame.

WRITTEN JUSTIFICATION AND SUPPORTING DOCUMENTATION FOR NOT PROCURING DESIGNATED ITEMS CONTAINING RECOVERED MATERIAL MUST BE ATTACHED.

Request Originator Date

Contracting Officer Date

Environmental Manager Date