

## Appendix S

### Affirmative Procurement

**S-1. Purpose.** This appendix establishes policies and procedures for the purchase of products with recycled and recovered materials, environmentally preferable products - which have less toxic effects on human health and the environment, and bio-based products.

#### S-2. References.

- a. Resource Conservation and Recovery Act § 6002 (42 USC § 6962)  
<http://www4.law.cornell.edu/uscode/42/6962.html>
- b. Federal Compliance with Right-To-Know Laws and Pollution Prevention, Executive Order 12856, 3 August 1993.  
<http://www.denix.osd.mil/denix/Public/Legislation/EO/note15.html>
- c. Greening the Government Through Waste Prevention, Recycling and Federal Acquisition, Executive Order 13101, 14 September 1998.  
<http://www.ofee.gov/eo13101/13101.htm>
- d. Federal Acquisition Regulation (FAR) Subchapter D, Part 23.404  
<http://www.arnet.gov/far/loadmain.html>
- e. Defense Federal Acquisition Regulation Supplement 223.4  
[http://www.acq.osd.mil/dp/dars/dfars/html/223\\_4.htm](http://www.acq.osd.mil/dp/dars/dfars/html/223_4.htm)
- f. Comprehensive Procurement Guidelines (CPG) I, 60 FR 21370, 1 May 1995.  
<http://www.epa.gov/docs/fedrgstr/EPA-WASTE/1995/May/Day-01/pr-213.html>
- g. CPG II, 62 FR 60962, 13 November 1997.  
<http://www.epa.gov/docs/fedrgstr/EPA-WASTE/1997/November/Day-13/f29734.htm>
- h. CPG III, 63 FR 165, 26, August 1998  
<http://www.ofee.gov/html/comprehe.pdf>
- i. Recovered Materials Advisory Notice (RMAN), 60 FR 21386, 1 May 1995.  
<http://www.epa.gov/docs/fedrgstr/EPA-WASTE/1995/May/Day-01/pr-211.html>
- j. RMAN I, 61 FR 26986, 29 May 1996.  
<http://www.epa.gov/docs/fedrgstr/EPA-WASTE/1996/May/Day-29/pr-571.txt.html>  
<http://www.epa.gov/docs/fedrgstr/EPA-WASTE/1998/June/Day-08/f15176.htm>
- k. RMAN II, 62 FR 60995, 13 November 1997.  
<http://www.epa.gov/epaoswer/non-hw/procure/rman2.htm>
- l. RMAN III, 63 FR 165, 26 August 1998.  
<http://www.epa.gov/docs/fedrgstr/EPA-WASTE/1998/August/Day-26/f22794.htm>
- m. Guidance on Conducting Inspections of Federal Facilities for Compliance with Section 6002 of the Resource Conservation and Recovery Act, 12 May 1999. <http://www.ofee.gov/html/rcra2.htm>

n. The Affirmative Procurement Program; Office of the Secretary of Defense, Under Secretary of Defense (Acquisition and Technology), July 1995.

[http://aec.army.mil/prod/usaec/et/p2/memo\\_01.htm](http://aec.army.mil/prod/usaec/et/p2/memo_01.htm)

o. AR 200-1; Section 10.3

[http://books.army.mil/cgi-bin/bookmgr/BOOKS/R200\\_1/CONTENTS](http://books.army.mil/cgi-bin/bookmgr/BOOKS/R200_1/CONTENTS)

### **S-3. Background.**

a. Waste Minimization and Diversion. The Resource Conservation and Recovery Act (RCRA) of 1976 began the regulatory tide toward waste minimization and the conservation of natural resources. Section 6002 of RCRA, later codified as 42 U.S.C. 6962, set the stage for recycling the wastes that could not be avoided through source reduction. **Recycling became an important tool that helped to avoid the cost and environmental impacts created by the disposal of wastes. It also provided an opportunity for the manufacture of new products utilizing materials recovered through recycling.** Many businesses already utilized materials recovered from their manufacturing processes in order to avoid the extra disposal costs.

b. Close the Loop. The use of recovered materials to manufacture other goods and the use of the least harmful products to our environment and human health support the original intent of RCRA in 1976, and the Pollution Prevention Act of 1990. The new national goal set for the federal government is 35% waste diversion by 2005. If we manufacture new goods with this 35%, we must “close the loop” by purchasing these goods.

c. EPA Designated Products. RCRA Section 6002 requires the Environmental Protection Agency (EPA) to designate items that are or can be made with recovered materials and to provide minimum recycled-content standards for the procurement of these items. The intent is to create a larger demand for items with recovered material, thus stimulating the demand for recyclables and avoiding the disposal of these items. Since the original passage of RCRA, the EPA has designated more than 50 products within 8 product categories described in a series of three Comprehensive Procurement Guidelines (CPGs) published in the Federal Register. These categories include: (1) paper and paper products; (2) vehicular products; (3) construction products; (4) transportation products; (5) landscaping products; (6) non-paper office products; (7) park and recreation products; and (8) miscellaneous products. **More specific descriptions of CPG items can be found in TAB 1.** Each CPG is accompanied by a Recovered Materials Advisory Notice (RMAN), published not as a regulatory document, but as a complementary document containing a more detailed explanation of the products and the minimum recommended recovered material content for each designated product. **TAB 2 contains definitions for the various terms used in this Appendix.** See Section 2, References and Section 15 for appropriate web sites about CPG, RMAN and vendor sources for recycled products.

d. Agency Policies. The procurement of these designated products containing recovered materials was reinforced through the Federal Acquisition Regulation (FAR), several Executive Orders (EOs), Army Regulation (AR) 200-1, and several memoranda and briefings from the Department of Defense and the Department of the Army. Most federal agencies have published their own requirements that mirror the requirements set forth in RCRA, EO 13101, and previous EOs that required federal agencies to develop programs for the procurement of products containing recovered materials, also known as affirmative procurement.

e. Compliance. The Congressional legislation and EPA guidance concerning affirmative procurement has centered on creating a national strategy for environmental protection rather than punishing non-compliance. However, in response to EO 13101 § 403, EPA has stated that compliance with affirmative procurement regulations will be evaluated as part of regular RCRA and multi-media inspections of federal facilities. Although EPA may not assess fines on federal facilities for non-compliance, Notices of Violation (NOVs) will be issued if the facility is out of compliance with Section 6002 of RCRA. The EPA has indicated that although the focus will be on vehicular products; re-refined oil, retread tires, and engine coolant, it may evaluate any item included in any of the Comprehensive Procurement Guidelines (CPGs).

f. Who Must Comply. The requirements of the program apply to any procuring agency spending \$10,000 or more in federally appropriated funds for items listed in the CPGs. This applies either when the purchase price of one item exceeds \$10,000 or the total cost of designated items exceeded \$10,000 in the previous fiscal year. The U.S. Code 42, § 6962, as well as the FAR, further state that an agency may make a decision not to procure such items when (a) the items are not available within a reasonable period of time; (b) the items fail to meet the performance standards set forth in the applicable specifications; (c) the items are only available at an unreasonable price; (d) are not available from a sufficient number of sources to maintain a satisfactory level of competition.

If the decision is made not to comply with affirmative procurement regulations, then the justification for that decision must be submitted in writing by the procuring activity. A copy of this decision will be retained in the DPC files. Written justification for non-compliance with affirmative procurement regulations does not apply to micro-purchases (credit card purchases less than \$2,500.00).

g. Summary. The Federal Government is responsible for almost 20% of the gross domestic product (GDP). The buying power of the Department of Defense alone accounts for 2-3 percent of the GDP. This presents a tremendous opportunity for good environmental stewardship through waste disposal avoidance. It also stimulates the markets for recyclables and ensures that local recycling programs continue.

#### **S-4. USATC Affirmative Procurement Policy.**

a. General Policy. The USATC has been actively diverting a significant amount of its solid waste through the Recycling Center since 1990. The installation has an interest in sustaining markets for recyclables as it strives to increase the solid waste recycled and decrease the solid waste disposed of each year. **With this in mind, it is in the best interest of the installation to purchase products made from recovered materials whenever possible. If consumers do not purchase these products, the demand for recyclables will drop.**

Therefore, it is the policy of the USATC to “buy recycled” whenever it is possible to do so for a reasonable price, within a reasonable period of time for a product quality equal to or greater than is available for the same product containing virgin materials. Procurement personnel (including credit card holders) are encouraged to obtain items included in the CPG with the highest content of post-consumer materials available. Items may also be available that are not included in the CPG, but are manufactured with recovered materials. Procurement personnel should give these products the same consideration as those listed in the CPG as long as products met the criteria stated in Section 3.f. The installation wants to place emphasis on the use of “recycled content” products in construction and renovation. **TAB 3 has a copy of the form which DPW contractors can use in documenting their use of recycled content products. It is recommended that this form can be adapted for use by other activities in their procurement of materials which may not have a construction purpose.**

Affirmative procurement guidance also recommends that each procuring agency review contract specifications and revise them as necessary to permit the use of recovered materials. Many older contract specifications require the use of virgin materials, so a review of existing specifications should be conducted to remove any unnecessary barriers to affirmative procurement.

b. General Program Implementation. The EPA, the Commonwealth of Virginia Department of Environmental Quality, as well as Department of Defense and Department of the Army look to the Environmental and Natural Resources Division (ENRD), Directorate of Public Works (DPW) to implement and report on installation adherence to EOs, RCRA, and the Pollution Prevention Act of 1990. The ENRD, DPW shall take the lead with respect to the Affirmative Procurement Program. The ENRD, DPW shall work closely with the Northern Region Contracting Center-Installation Division and the Regional Directorate of Logistics (RDOL) to develop and communicate guidance for the purchase of those products with recovered materials, as well as to implement regulations concerning affirmative procurement, including FAR clauses 52.223-4 Recovered Material Certification; and 52.223-9 Estimate of Percentage of Recovered Material Content for EPA Designated Products.

Procurement personnel are encouraged to determine which CPG items they purchase. Information concerning CPG items will be available at the ENRD, DPW website

<http://dpw-web.eustis.army.mil/ENRD/ENRDhome/index.htm> or by contacting ENRD, DPW at 878-4123.

ENRD, DPW will use a promotional strategy to keep installation personnel apprised of information related to Affirmative Procurement Program compliance. The promotional efforts are comprised of the following components:

- Electronic mail
- ENRD/DPW Website <http://dpw-web.eustis.army.mil/ENRD/ENRDhome/index.htm>
- Training events
- Fact Sheets

ENRD, DPW will conduct a survey of selected activities near the end of each fiscal year to gauge the progress of participation in the Affirmative Procurement Program.

#### **S-5. Specific Guidelines for Implementation of Affirmative Procurement of Product Categories**

The guidelines for implementation of the Affirmative Procurement Program are outlined for each product category in Sections 6- 16. Questions regarding these guidelines should be directed to ENRD, DPW at 878-4123. More detailed information can also be found at the ENRD, DPW website, located at <http://dpw-web.eustis.army.mil/ENRD/ENRDhome/index.htm>

#### **S-6. Paper and paper products.**

a. Personnel who procure paper on behalf of individual Fort Eustis and Fort Story activities are encouraged to purchase paper with the maximum recovered material and post-consumer content practicable. The CPG RMANs describe more than 11 different categories of paper and paper products that contain post-consumer and recovered materials. The contents of these RMANs are summarized on various EPA web sites -(See Reference section and Section 15 of this Appendix) or consult ENRD, DPW website for more detailed information on the procurement of other kinds of paper with recovered materials content.

<http://dpw-web.eustis.army.mil/ENRD/ENRDhome/index.htm>

b. Printing and writing papers comprise a large percentage of the paper purchased at Fort Eustis and Fort Story. Examples include stationery, computer printout paper, note pads, copier paper, and offset paper. These papers may be either coated or uncoated. Generally, personnel are encouraged to purchase uncoated writing paper used as copier, computer or notepaper that contains a minimum of 30% post-consumer content.

#### **S-7. Vehicular Products. The Three Vehicular Products included in the CPG are Re-Refined Oil, Engine Coolant and Retread Tires.**

a. RE-REFINED OIL. Procurement personnel are encouraged to purchase re-refined oil instead of virgin oil when possible. The EPA recommends that the re-refined oil content be 25% or greater. This guideline applies to procurement personnel who purchase engine oil, hydraulic oil, or gear oil for ground vehicles. Most activities must use the Hazmart for the purchase of oil. The Fort Eustis Hazmart is located in building 1205 and can be reached at 878-2781. The Fort Story Hazmart is located in building 2717 at Little Creek Naval Amphibious Base and can be reached at 462-4025.

b. ENGINE COOLANT. All who utilize tactical vehicles are encouraged to utilize recycled engine coolant (antifreeze). Most work-sites are equipped with an onsite coolant recycler. Activities with no onsite coolant recycler may utilize coolant recycled by other installation activities or contact ENRD, DPW at 878-4232, for assistance in having their coolant recycled. Although coolant can use propylene glycol as the chemical base, this is not currently authorized for use in tactical vehicles. If propylene glycol becomes authorized for tactical vehicles, procurement personnel should be careful not to purchase two different types of coolant for use in the same vehicle or coolant recycler.

c. RETREAD TIRES. Individual activities determine their participation in the installation retread tire program. Activity procurement personnel should consult the ENRD, DPW website at <http://dpw-web.eustis.army.mil/ENRD/ENRDhome/index.htm> or call 878-4123 for information on participating in the program.

**S-8. Paint (Architectural Applications).**

a. Paint must be purchased through the Fort Eustis Hazmart, located in building 1205 or the Fort Story Hazmart, located at Little Creek Naval Amphibious Base. Procurement personnel are encouraged to give preference to latex paints for architectural applications and primary consideration to reprocessed latex paints. Refer to for the post consumer content requirements for latex paint listed on various RMAN EPA web sites-(See Reference section and Section 15 of this Appendix).

b. When oil-based or anti-corrosive paints are selected, personnel are encouraged to select paints that do not exceed the following volatile organic compounds (VOCs) content:

Interior Coatings . . . . .	50 g/l	(flat)
Interior Coatings . . . . .	150 g/l	(nonflat)
Exterior Coating . . . . .	100 g/l	(flat)
Exterior Coating . . . . .	200 g/l	(nonflat)
Solvent-based Paints . . .	380 g/l	
Water-based acrylic . . . .	250 g/l	
Catalyzed Epoxy . . . . .	250 g/l	

Source: Aberdeen Proving Ground Study on Environmentally Preferable Paints

c. Procurement personnel should always read the product material safety data sheet (MSDS) and are encouraged to avoid purchasing paints containing any the materials listed below:

Methylene Chloride	Di-n-butyl phthalate
1,1,1-Trichloroethane	Di-n-ocetyl phthalate
Benzene	Diethyl phthalate
Toluene (methylbenzene)	Dimethyl phthalate
Ethylbenzene	Isophorone
Vinyl Chloride	Formaldehyde
Naphthalene	Methyl ethyl ketone
1,2-Dichlorobenzene	Methyl isobutyl
Di (2-ethylhexyl) phthalate	Acrolein
Butyl benzyl phthalate	Acrylonitrile

Source: Aberdeen Proving Ground Study on Environmentally Preferable Paints

The affirmative procurement policy applies to all paint purchases, except for paints used to paint aircraft, watercraft, and ground vehicles. All paints will be purchased through the Fort Eustis or Fort Story Hazmart.

**S-9. Non-Paper Office Products.**

There are a total of 12 different types of office products made of plastic and steel that contains recovered materials and post consumer fibers. These include binders, clipboards, file folders, office recycling containers, waste receptacles, trash bags, desktop accessories, printer ribbons, and toner cartridges. Procurement personnel are encouraged to purchase plastic or steel non-paper office products containing post-consumer and recovered materials. Personnel may elect to purchase non-paper office products made of some material other than plastic or steel. Please refer to EPA web sites (see reference section) and Section 15 of this Appendix for a full list of these products and the guidelines for minimum recovered material and post-consumer content.

**S-10. Construction Products.**

a. There are several different construction products currently available containing recovered and/or post-consumer materials. Some of these products include building insulation, carpet, cement and concrete containing coal fly ash, patio blocks, and laminated paperboard. Please refer to EPA web sites (see reference section) and Section 15 of this Appendix for a full list of these products and the guidelines for minimum recovered material and post-consumer content.

b. Construction products are made from a variety of materials; some contain recovered materials and some do not. Personnel are encouraged to specify and purchase construction products containing recovered and/or post-consumer materials when the price, specifications, and availability are comparable to or exceed products containing virgin materials. If the product is made of virgin materials and is not available with recovered or post-consumer materials, there is no affirmative procurement guideline.

**S-11. Landscaping Products.**

a. There are seven different landscaping products currently available containing recovered and/or post-consumer materials. Some of these products include garden hoses, soaker hoses, hydraulic mulch, lawn and garden edging, compost, and plastic lumber. Please refer to for a full list of these products and the guidelines for minimum recovered material and post-consumer content.

b. Landscaping products are made from a variety of materials; some contain recovered materials and some do not. Personnel are encouraged to specify and purchase landscaping products containing recovered and/or post-consumer materials when the price, specifications, and availability are comparable to or exceed products containing virgin materials. If the product is made of virgin materials and is not available with recovered or post-consumer materials, there is no affirmative procurement guideline.

**S-12. Transportation Products**

a. There are six different transportation products currently available containing recovered and/or post-consumer materials. Some of these products include channelizers, delineators, parking stops, traffic barricades, and traffic cones. Please refer to EPA web sites (see reference section) and Section 15 of this Appendix for a full list of these products and the guidelines for minimum recovered material and post-consumer content.

b. Transportation products are made from a variety of materials; some contain recovered materials and some do not. Personnel are encouraged to specify and purchase transportation products containing recovered and/or post-consumer materials when the price, specifications, and availability are comparable to or exceed products containing virgin materials. If the product is made of virgin materials and is not available with recovered or post-consumer materials, there is no affirmative procurement guideline.

**S-13. Parks and Recreation Products.**

a. There are five different parks and recreation products currently available with recovered and/or post-consumer materials. Some of these products include plastic fencing, playground surfaces, running tracks, picnic tables/benches and playground equipment. Please refer to EPA web sites (see reference section) and Section 15 of this Appendix for a full list of these products and the guidelines for minimum recovered material and post-consumer content.

b. Parks and recreation products are made from a variety of materials; some contain recovered materials and some do not. Personnel are encouraged to specify and purchase parks and recreation products containing recovered and/or post-consumer materials when the price, specifications, and availability are comparable to or exceed products containing virgin materials. If the product is made of virgin materials and is not available with recovered or post-consumer materials, there is no affirmative procurement guideline.

**S-14. Miscellaneous Products.**

a. There are seven different miscellaneous products outlined in the CPG that are currently available containing recovered and/or post-consumer materials. Some of these products include pallets, sorbents, industrial drums, awards/plaques, mats, strapping, and signs. Please refer to EPA web sites (see reference section) and Section 15 of this Appendix for a full list of these products and the guidelines for minimum recovered material and post-consumer content.

b. The miscellaneous products outlined in the CPG are made from a variety of materials; some contain recovered materials and some do not. Personnel are encouraged to specify and purchase products containing recovered and/or post-consumer materials when the price, specifications, and availability are comparable to or exceed products containing virgin materials. If the product is made of virgin materials and is not available with recovered or post-consumer materials, there is no affirmative procurement guideline.

**S-15. Sources for Products and Information on Affirmative Procurement.**

There are many sources for products with recovered materials, as well as for environmentally preferable products. Many of the sources are within the Federal Supply System (FSS), but there are also many local businesses that carry products that fit within the affirmative procurement framework. Some of the sources listed here are sources of supply. Others are sources of information that provide more details about affirmative procurement to assist personnel with procurement decisions.

**Partial List of Product Sources & Information****A. GENERAL DATA:**

1. GreenSpec Binder, Environmental Building News, [www.ebuild.com](http://www.ebuild.com)
2. Certified Forest Products Council, [www.cerifiedwood.org/](http://www.cerifiedwood.org/)
3. Wiley Series in Sustainable Design, [www.wiley.com/](http://www.wiley.com/)
4. The Carpet and Rug Institute, [www.carpet-rug.com/](http://www.carpet-rug.com/)
5. Information, McGraw-Hill, [dialogue@mcgraw-hill.com](mailto:dialogue@mcgraw-hill.com)
6. Florida Directory of Recycled Product Vendors, [www.2.dep.state.fl.us/waste/programs/rbac/downloads/rbac\\_dir.pdf](http://www.2.dep.state.fl.us/waste/programs/rbac/downloads/rbac_dir.pdf)
7. Oikos Green Building Source, News, searchable products data base, library, [www.oikos.com](http://www.oikos.com)
8. Green Design Network, News, publications, databases, [www.greendesign.net](http://www.greendesign.net)
9. Green Works Recycled Content7 Product Guide, detailed vendors directory, [www.metrokc.gov/greenworks/recycontent.htm](http://www.metrokc.gov/greenworks/recycontent.htm)>

**B. CONCRETE**

1. GranCem, granulated blast-furnace slag, [www.grancem.com/](http://www.grancem.com/)
2. Syndesis, cement-based, pre-cast product workable with wood tools, [www.syndesisinc.com/](http://www.syndesisinc.com/)

**C. MASONRY**

1. Heble Building Systems, autoclaved aerated concrete blocks, [www.heble.com/](http://www.heble.com/)
2. Ytong Florida Ltd., autoclaved aerated concrete blocks, [www.ytong-usa.com/](http://www.ytong-usa.com/)

**D. WOOD & PLASTICS**

1. Avonite, solid surfacing, [www.avonite.com/](http://www.avonite.com/)
2. Chemical Specialties, wood treatment, [www.treatedwood.com/](http://www.treatedwood.com/)
3. Homasote Company, structural fiberboard, [www.homasote.com/](http://www.homasote.com/)
4. Isoboard, fiberboard composed of straw fibers and non-toxic resins, [www.isoboard.com/](http://www.isoboard.com/)
5. TrusJoist Mac Millan, engineered wood products, [www.homasote.com/](http://www.homasote.com/)

E. THERMAL & MOISTURE PROTECTION

1. Duro-Last Roofing, recycled PVC walkway pads, 1-800-2480280
2. Johns Manville, Insulation products, [www.jm.com/](http://www.jm.com/)
3. Majestic Skylines, rubber-based slate-look roofing for steep roofs, [www.majesticskylines.com/](http://www.majesticskylines.com/)
4. Owens-Corning, insulation products, [www.owenscorning.com/](http://www.owenscorning.com/)

F. DOORS & WINDOWS

1. Marvin Window & Door, windows, some meeting “Energy Star Label”, [www.marvin.com/](http://www.marvin.com/)
2. Pella, energy efficient windows, [www.pella.com/](http://www.pella.com/)

G. FINISHES

1. Armstrong World Industries, Inc.-Flooring Systems, [www.armstrong-floors.com/](http://www.armstrong-floors.com/)
2. Armstrong World Industries, Inc.-Ceiling Systems, [www.ceilings.com/](http://www.ceilings.com/)
3. Benjamin Moore & Co., VOC free acrylic interior latex paint, [www.benjaminmoore.com/](http://www.benjaminmoore.com/)
4. CanFibre Group Ltd., all-green medium-density fiberboard, [www.canfibre.com](http://www.canfibre.com)
5. Chemrex Inc., low-e interior paint, [www.chemrex.com/](http://www.chemrex.com/)
6. Collins & Aikman Floor coverings, carpet with 100% post-consumer backing, [www.powerbond.com/](http://www.powerbond.com/)
7. DesignTex, Inc., polyester panel fabric made from 100% PET fiber, [www.dtex.com/](http://www.dtex.com/)
8. Dodge-Regupol, Inc., 100% recycled rubber-flooring, [www.regupol.com/](http://www.regupol.com/)
9. Eco-sensitive modular tile, vinyl tile with 100% recycled carpet-backing, [www.powerbond.com/](http://www.powerbond.com/)
- 10.Environmental Stone Products, stone manufactured from 100% recycled glass, [www.environmentalstone.com/](http://www.environmentalstone.com/)
11. Glidden: residential interior latex paints 100% free of VOC, [www.icipaintstores.com/](http://www.icipaintstores.com/)
12. Homasote Inc., sound barrier, [www.homasote.com/](http://www.homasote.com/)
13. Isoboard Enterprises, Inc. panel made from wheat straw and non-toxic resins, 1-503-2427345
14. Marley-Flexco Co., flooring made from 95% recycled truck and bus tires, [www.marleyflexco.com/](http://www.marleyflexco.com/)
15. The Mat Factory, Inc., interlocking roll-up tiles made from 100% postconsumer tire rubber and PVC plastic from electric cable covers, 1-949-6453122
16. Permafirm Pad Co., carpet pads made from almost 100% recycled content, 1-800-3446977
17. Sherwin Williams, VOC compliant paints and enamels, [www.sherwin.com/](http://www.sherwin.com/)
18. SierraPine Limited, formaldehyde-free particleboard and medium density fiberboard containing recycled/recovered wood fiber, [www.sierrapine.com/](http://www.sierrapine.com/)
19. Summitville Tiles, impervious porcelain tiles using feldspar tailings, [www.summitville.com/](http://www.summitville.com/)
20. Tectum, natural-fiber acoustical ceiling and wall panels, [www.tectum.com/](http://www.tectum.com/)
21. Tiles with natural fibers, tiles made of a bio-alloy material and natural fibers, [www.maderatile.com](http://www.maderatile.com)
22. USG Interiors, Inc., synthetic gypsum board, [www.usg.com/](http://www.usg.com/)
23. Decorative Architectural Tiles, floor, counter & wall tile made from 100 % postconsumer glass, 1-808-8857812
24. Forbo, linoleum-flooring utilizing renewable resources, [www.forbo.com/](http://www.forbo.com/)

H. SPECIALTIES

1. The Access Store, modular ramping system made from 100% recycled rubber, [www.accessstoe.com/](http://www.accessstoe.com/)
2. BP Solar, photovoltaic modules and systems, [www.bp.com/bpsolar/index](http://www.bp.com/bpsolar/index)
3. Mecho Shade Systems, interior shade cloths, [www.mechoshade.com/](http://www.mechoshade.com/)
4. R Control, structural insulated panel (SIP), [www.mechoshade.com/](http://www.mechoshade.com/)

I. FURNISHINGS

1. Guilford of Maine, fabric from 100% recycled materials, [www.terratex.com/](http://www.terratex.com/)
2. Phenix Biocomposites, tabletops made from soy based products free of petrochemicals, 1-800-3248187
3. Safe Solutions, LLC, furniture manufactured from waste wood, 1-970-2473333

J. CONVEYING SYSTEMS

1. Montgomery KONE, AC girlies elevators, [www.montgomery-kone.com/](http://www.montgomery-kone.com/)

**K. ELECTRICAL**

1. Advance Transformer Company, linear reactor ballast, [www.advancetransformer.com/](http://www.advancetransformer.com/)
2. Artemide Inc., energy efficient cold-cathode lighting, [www.artemide.com/](http://www.artemide.com/)
3. Edison Price Lighting, track mounted metal-halide PAR 30 & 38 lamps, 1-212-5216995
4. Leviton Manufacturing Corporation, Inc., occupancy sensors, [www.leviton.com/](http://www.leviton.com/)
5. Phillips Lighting, energy efficient compact fluorescent lamps, [www.phillips.com/lighting](http://www.phillips.com/lighting)
6. Osram Sylvania, mercury-free lamps and energy efficient fluorescent lamps, [www.osramsylvania.com/](http://www.osramsylvania.com/)
7. Sensor Switch, lighting control occupancy sensors, [www.sensorswitch.com/](http://www.sensorswitch.com/)
8. Venture Lighting, pulse-start high performance lamp and ballast system, [www.venturelighting.com/](http://www.venturelighting.com/)

**Other Sources:**

1. Defense Supply Center Richmond:  
Features the Environmental Products Catalog; access at [www.dscr.dla.mil](http://www.dscr.dla.mil) clicking on *Catalogs with Online Ordering*, then click on *Environmental* or call 1-800-352-2852.
2. Defense Logistics Agency: Features Electronic Mall Shopping. Call 800-352-2852. [www.supply.dla.mil](http://www.supply.dla.mil) Click on *Table of Contents*, scroll down to *DLA Environmental Support Products*, then click on *DSCR Environmentally Preferred Products Catalog*.
3. Office of the Federal Environmental Executive: [www.ofee.gov](http://www.ofee.gov)
4. Comprehensive Procurement Guidelines. [www.epa.gov/cpg](http://www.epa.gov/cpg)
5. Environmentally Preferable Purchasing (EPP). [www.epa.gov/opptintr/epp](http://www.epa.gov/opptintr/epp)

**S-16. Standards for Designated Products.**

- a. Generally, the USATC policy is to purchase products with the highest content of post consumer materials that is available and practical. The standards have been published in detail in a total of four Recovered Material Advisory Notices (RMANs). These RMANs are referenced in Section 2, References of this appendix.
- b. It should be noted that there are usually two standards listed. There is a guideline for an overall percentage of recovered material content. However, in most instances there is also a guideline for post consumer content. The regulations go into great detail about the difference between recovered materials and post consumer materials. The goal is to encourage the use of as many post-consumer materials as possible, since post-consumer materials are what come from recycling centers around the nation. Recognizing that materials recovered from the manufacturing process are also important to solid waste diversion, the EPA has included the minimum percentage of post-consumer material as a portion of the total recovered materials. Thus, the main reason for communicating the standards and encouraging compliance to the standards is to ensure that the demand remains strong for post-consumer materials as well as all other recovered materials.
- c. It should also be noted that some of the products on the CPG are manufactured utilizing a broad range of materials. For example, landscaping timbers may be available in plastic or wood. The affirmative procurement guidelines set forth in the previously noted regulations and EOs do not require that the plastic landscaping timbers be selected instead of the wood timbers. It only requires that, if plastic timbers are selected, preference be given to plastic timbers containing the minimum recovered content standards described in the RMAN. **The engineer, architect or technical POC still makes the decision concerning which product is better suited for the application.**

**S-17. Environmentally Preferable and Bio-Based Products.**

a. Environmentally preferable purchasing, or EPP, is the name of the US Environmental Protection Agency (EPA)'s program to encourage the purchase of products which have lesser or decreased effects on human health and the environment, when compared with competing products or services that serve the same purpose.

b. EPP is implemented by requiring activities obtaining hazardous materials to provide DPW-ENRD with the MSDS for the proposed product before purchase. In that way, ENRD can ensure that the products do not contain components harmful to human health and/or the environment.

c. A bio-based product is "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." Examples of bio-based products include vegetable-based lubricating oils, building construction panels made with straw or other agricultural fibers, and "tree-free" paper. This initiative is new and DPW-ENRD is awaiting guidelines from Department of Army to implement purchase of this product line.

**S-18. Awards Program**

The USATC recognizes the environmental stewardship of military and civilian personnel each April during Earth Week. As part of the existing awards effort, a program that recognizes exemplary efforts in affirmative procurement and the purchase of environmentally preferable products will be developed and implemented.

## Tab 1 Appendix S

<b>TAB 1: CATEGORIES AND DESIGNATED ITEMS COVERED BY THE COMPREHENSIVE PROCUREMENT GUIDELINES</b>
<p><b>Paper and Paper Products</b></p> <ul style="list-style-type: none"> <li>• Printing and Writing Papers (Uncoated)</li> <li>• Printing and Writing Paper (Coated)</li> <li>• Bristol File Folders (Manila and Colored)</li> <li>• Dyed Filing Products</li> <li>• Cards, index, postal, other</li> <li>• Pressboard Report Covers and Binders</li> <li>• Tags and Tickets</li> <li>• Newsprint</li> <li>• Commercial/Industrial Sanitary Tissue Products</li> <li>• Paperboard and Packaging Products</li> <li>• Miscellaneous Paper Products</li> </ul>
<p><b>Vehicle Products</b></p> <ul style="list-style-type: none"> <li>• Engine Coolants</li> <li>• Re-refined Lubricating Oils</li> <li>• Retread Tires</li> </ul>
<p><b>Construction Products</b></p> <ul style="list-style-type: none"> <li>• Building and Insulation Products</li> <li>• Carpet</li> <li>• Cement and Concrete Containing Coal Fly Ash and Ground Granulated Blast Furnace Slag</li> <li>• Consolidated and Reprocessed Latex Paint</li> <li>• Floor Tiles</li> <li>• Patio Blocks</li> <li>• Shower and Restroom Dividers and Partitions</li> <li>• Structural Fiberboard</li> <li>• Laminated Paperboard</li> <li>• Nylon Carpet (Broadloom and Tiles) Made with backing Containing Recovered Materials</li> <li>• Carpet Cushion (Polyester)</li> <li>• Flowable Fill Containing Coal Fly Ash and/or Ferrous Foundry Sands</li> <li>• Railroad Grade Crossing Surfaces Containing Coal Fly Ash, Recovered Rubbers, or Recovered steel</li> </ul>
<p><b>Transportation Products</b></p> <ul style="list-style-type: none"> <li>• Channelizers</li> <li>• Delineators</li> <li>• Flexible Delineators</li> <li>• Parking Stops</li> <li>• Traffic Barricades</li> <li>• Traffic Cones</li> </ul>
<p><b>Landscaping Products</b></p> <ul style="list-style-type: none"> <li>• Garden and Soaker Hoses</li> <li>• Hydraulic Mulch</li> <li>• Lawn and Garden Edging</li> <li>• Yard Trimmings Compost</li> <li>• Compost made from Yard Trimmings and/or Food Waste</li> <li>• Plastic Lumber Landscaping Timbers and Posts Containing Recovered Materials</li> </ul>

**Non-Paper Office Products**

- Solid Plastic Binders, Plastic Clipboards, Plastic File Folders, Plastic Clip Portfolios, and Plastic Presentation Folders Containing Recovered Plastic
- Binders
- Office Recycling Containers
- Office Waste Receptacles
- Plastic Desktop Accessories
- Plastic Envelopes
- Plastic Trash Bags
- Printers Ribbons
- Toner Cartridges

**Park and Recreation Products**

- Plastic fencing
- Playground Surfaces
- Running Tracks
- Park Benches
- Picnic Tables
- Playground Equipment

**Miscellaneous**

- Pallets
- Sorbents Containing Recovered Materials for Use in Oil and Solvent Clean-ups and as Animal Bedding
- Industrial Drums Containing Recovered Steel, Plastic, and Paper
- Awards and Plaques Containing Recovered Glass, Wood, Paper, or Plastic
- Mats Containing Recovered Rubber and/or Plastic
- Manual-Grade Strapping Containing Recovered Steel and Plastic
- Signs Containing Recovered Plastic or Aluminum and Sign Posts/Supports Containing Recovered Plastic or Steel

## Tab 2 Appendix S Definitions

- 1. AFFIRMATIVE PROCUREMENT.** The purchase of environmentally preferable products manufactured from recycled and reclaimed materials.
- 2. ACQUISITION.** The acquiring by contract with appropriated funds for supplies or services (including construction) by and for the use of the Federal Government through purchase or lease, whether the supplies or services are already in existence or must be created, developed, demonstrated, and evaluated. Acquisition begins at the point when agency needs are established and includes the description of requirements to satisfy agency needs, solicitation and selection of sources, award of contracts, contract financing, contract performance, contract administration, and those technical and management functions directly related to the process of fulfilling agency needs by contract.
- 3. ARCHITECTURAL PAINT.** Any latex or oil-based paint that is used for interior or exterior architectural applications such as wallboard, ceilings, and trim; gutter boards, concrete, stucco, masonry, wood, metal surfaces, and consolidated latex paints used for covering graffiti, where color and consistency of performance are not primary concerns.
- 4. BIO-BASED PRODUCT.** A bio-based product is “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.” Examples of bio-based products include vegetable-based lubricating oils, building construction panels made with straw or other agricultural fibers, and “tree-free” paper. These products often put materials to use that were destined for the landfill. Since they are usually made of “natural” materials with limited processing, they may also be less toxic and require fewer chemicals and less energy to produce.
- 5. COMPREHENSIVE PROCUREMENT GUIDELINES (CPG).** Issued by the EPA pursuant to Section 6002 of the RCRA. These guidelines identify items that are or can be produced with recovered materials and provide recommended practice for procurement of such items. Three CPGs have been published in the Federal Register. Accompanying the CPGs are RMANs, which contain detailed minimum-content standards for products made with recovered materials.
- 6. CONTRACTOR (S).** The prime contractor, subcontractors, material suppliers, and equipment suppliers who provide the products that will be used in the construction of this project.
- 7. ENVIRONMENTALLY PREFERABLE.** Products or services having a lesser or reduced effect on human health and the environment when compared to competing products or services, serving the same purpose. This comparison may consider raw materials acquisition, production, manufacturing, packing, distribution, reuse, operation, maintenance, or product or service disposal. (EO 13101)
- 8. EPA DESIGNATED ITEM.** An item that is or can be made with recovered material; that is listed by the Environmental Protection Agency (EPA) in a procurement guideline (40CFR, part 427); and for which EPA has advised purchasing recommendations in a related Recovered materials Advisory Notice (RMAN). (FAR 23.402)
- 9. EXECUTIVE AGENCY OR AGENCY.** An executive agency as defined in 5 U.S.C. 105. For the purpose of this order, military departments, as defined in 5 U.S.C. 102 are covered under the auspices of the Department of Defense.
- 10. FORM.** The Affirmative Procurement Reporting Form found at the end of this section.
- 11. POLLUTION PREVENTION.** Source reduction as defined in the Pollution Prevention Act of 1990 (42 U.S.C. 13102), and other practices that reduce or eliminate the creation of pollutants through (a) increased efficiency in the use of raw materials, energy, water, or other resources; or (b) protection of natural resources by conservation.

**12. PRODUCT.** Materials and equipment that will be used in the construction of this project.

**13. POSTCONSUMER MATERIAL..** 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".

**14. PROCUREMENT PERSONNEL.** Personnel who write specifications to obtain services, supplies and construction" means anyone who purchases material with federally appropriated funds. This includes credit card holders.

**15. PROCURING AGENCY.** Any State or Federal agency that uses federally appropriated funds for such procurement, or any person contracting with any agency for work to be performed under such contract.

**16.RECOVERED MATERIALS.** Waste materials 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. (EO 13101, 42 U.S.C. 6903 (19) and FAR 23.402)

**17.RECYCLABILITY.** The ability of a product or material to be recovered from or otherwise diverted from the solid waste stream for the purpose of recycling. (EO 13101)

**18.RECYCLING.** The series of activities, including collection, separation, and processing by which products or other materials are recovered from the solid waste steam for use in form of raw materials in the manufacture of new products other than fuel for producing heat or power by combustion. (EO 13101)

**19.RECYCLED MATERIAL.** A material utilized in place of raw or virgin material in product manufacturing consisting of materials derived from postconsumer waste, industrial scrap, materila derived from agricultural wastes, and other items, all of which can be used in new product manufacturer. (EPA Guidelines & OFPP Policy Letter 92-4)

**20.RECYCLED PRODUCT.** A recycled product is one made completely or partially from waste materials or by-products recovered or diverted from the solid waste stream.

**21.SOLID WASTE.** Garbage, refuse, sludges and other discarded materials including those from industrial, commercial, and agricultural operations, and from community activities. This excludes solids or dissolved materials in domestic sewage or other significant pollutants in water resources, such as silt, dissolved or suspended solids in industrial waste water effluents, dissolved materials in irrigation return flow, etc. (EPA Guidelines)

**22. SPECIFICATION (S).** A clear and accurate description of the technical requirements for materials, products, or services including the minimum requirement for materials' quality and construction and any equipment necessary for an acceptable product. In general, specifications are in the form of written descriptions, drawings, prints, commercial designations, industry standards, and other descriptive references.

**23. UNREASONABLE PRICE.** If the cost of the recycled content product exceeds the cost of a non-recycled item, the Air Force considers the cost to be unreasonable. (Air Force Affirmative Procurement Plan)

**24. VERIFICATION.** Procedures used by procuring agencies to confirm both vendor estimates and certifications of the percentages of recovered materials contained in the products supplied to them or to be used in the performance of a contract. (EPA Guidelines)

**25. WASTE PREVENTION.** 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.

**26.WASTE REDUCTION.** Preventing or decreasing the amount of waste being generated through waste prevention, recycling, or purchasing recycled and environmentally preferable products.

**Tab 3 Appendix S**  
**Affirmative Procurement Reporting Form**  
**(Per Executive Orders 13101/13148)**

PROJECT NUMBER: \_\_\_\_\_

BLDG NUMBER: \_\_\_\_\_

PROJECT MANAGER: \_\_\_\_\_

PROJECT INSPECTOR: \_\_\_\_\_

CONTRACTOR: \_\_\_\_\_

This form is to be completed by the Contractor and submitted through Contracting Officer to DPW-Engineering and Services. It is the responsibility of the Engineering and Services construction inspector to submit this data to DPW-ENRD who in-turn reports it to Army Environmental Center IAW E.O. 13101, Federal Acquisition, Recycling, and Waste Prevention and E.O. 13148, Greening the Government through Leadership in Environmental Management

RECYCLED OR RECOVERED PRODUCT	% REQUIRED (MINIMUM)	% AVAILABLE (ACTUAL)	QUANTIT Y USED	EXEMPTED 1,2,3,4
-ROCK WOOL INSUL	75%			
-FIBERGLASS INSUL	20-25%			
-LOOSE FILL/SPRAY ON INSUL	75%			
-PERLITE COMP BOARD INSUL	23%			
-PLASTIC RIGID FOAM INSUL	9%			
-GLASS FIBER REINF FOAM INSUL	6%			
-PHENOLIC RIGID FOAM INSUL	5%			
-STRUCTURAL FIBER BD	80-100%			
-LAMINATED PAPER BD	100%			
-CEMENT/CONCRETE (FLYASH)	SEE SPEC			
-CARPET (PET)	25-100%			
-PATIO BLOCKS/RUBBER	90-100%			
-PATIO BLOCKS/PLASTIC	90-100%			
-FLOOR TILES/RUBBER	90-100%			
-FLOOR TILES/PLASTIC	90-100%			
-TRAFFIC CONES	50-100%			
-TRAFFIC BARRICADES	80-100%			
-PLAYGROUND SURFACES	90-100%			
-RUNNING TRACKS	90-100%			
-COMPOST	100%			
-WOOD-BASED HYDRAULIC MULCH	100%			
-PAPER-BASED HYDRAULIC MULCH	100%			
REPROCESSED LATEX PAINT WHITE, OFF-WHITE & PASTEL COLORS	20%			
REPROCESSED LATEX PAINT GREY, BROWN, EARTHTONES & OTHER DARK COLORS	50-99%			
CONSOLIDATED LATEX PAINT	100%			
PLASTIC/RUBBER PARKING STOPS	100%			
CONCRETE CONTAINING COAL FLY ASH PARKING STOPS	20-40%			
CONCRETE CONTAINING GGBF PARKING STOPS	25-70%			
PLASTIC SHOWER & RESTROOM DIVIDERS/PARTITIONS	20-100%			

CERTIFICATION

I hereby certify the Statement of Work/Specifications for the requisition/procurement of all materials listed on this form comply with EPA standards for recycled/recovered materials content.

\_\_\_\_\_  
Contractor

\_\_\_\_\_  
DPW-E&S Inspector

The following exemptions may apply to the non-procurement of recycled/recovered content materials:

- 1) The product does not meet appropriate performance standards
- 2) The product is not available within a reasonable time frame
- 3) The product is not available competitively (from two or more sources)
- 4) The product is only available at an unreasonable price (compared with a comparable non-recycled content product.)