

Report to Congress

**RESOURCE CONSERVATION AND
RECOVERY ACT:**

A REPORT ON AGENCIES' IMPLEMENTATION FOR FISCAL YEARS 2002 AND 2003

OCTOBER 2005

**Office of Management and Budget
Office of Federal Procurement Policy**

TABLE OF CONTENTS

EXECUTIVE SUMMARY	v
CHAPTER 1: INTRODUCTION	
Statutory Requirements.....	1
Reporting Methodology	2
CHAPTER 2: ACTIVITY REPORT	
Government Accountability Office Study	5
Comprehensive Procurement Guidelines.....	5
Training.....	5
Biobased Products Procurement Guidelines.....	6
<i>FAI Insight</i> Column	6
Greening the Government Report.....	7
National Recycling Congress – FEE Education Program	7
Executive Order 13101 Interagency Advisory Group	7
Agency Environmental and Energy Executives	7
The White House Closing the Circle Awards.....	8
America Recycles Day.....	8
Electronics De-Manufacturing and Recycling.....	8
Sustainable Design/Green Buildings	9
CHAPTER 3: SUCCESS STORIES	
Major Agencies.....	11
Department of Defense	11
Department of Energy.....	13
Federal Sustainable Building Efforts.....	13
Other Agencies	14
Department of Agriculture.....	14
Department of Homeland Security	14
Department of the Interior	14
Environmental Protection Agency.....	15
U.S. Postal Service.....	15
CHAPTER 4: DATA COLLECTION AND ANALYSIS	
Federal Procurement Data System Information.....	17
Purchases of Copier Paper Through the Government Printing Office	20
Indicator CPG Products	20
Affirmative Procurement Programs.....	23
Affirmative Procurement Policy.....	24

Training	24
Auditing	27
Goals for Buying Recycled Content Products	28
Environmentally Preferable Products and Services	30
Waste Prevention	31
Recycling Programs	33

CHAPTER 5: CONCLUSIONS

Progress	37
A Twenty-Year Perspective	37

APPENDICES

Appendix A, <i>Statutory Requirements</i>	39
Appendix B, <i>RCRA Data Questionnaire</i>	51

TABLES

Table 1. FY 2002 Federal Procurement Data System Information Regarding the Purchase of EPA-Designated Recycled Content Products (% of Contracting Actions Reported)	17
Table 2. FY 2003 Federal Procurement Data System Information Regarding the Purchase of EPA-Designated Recycled Content Products (% of Contracting Actions Reported).....	18
Table 3. FY 2002 and 2003 Agency Purchases of the Eight Indicator Products (% of Total Purchases of Each Product)	22
Table 4. FY 2002 and 2003 Agency Purchases from GSA (% of Total Purchases of Each Product).....	23
Table 5. Affirmative Procurement Policies and Procedures	25
Table 6. Percentages of Agency Personnel with Documented Affirmative Procurement Training.....	27
Table 7. Auditing Compliance With Affirmative Procurement (FY 2002 and FY 2003)	28
Table 8. Recycling in FY 2002 and 2003	35

ACRONYMS

ARD	America Recycles Day
BARC	Beltsville Agricultural Research Center
BPA	Blanket purchase agreement
CPG	Comprehensive Procurement Guideline
DAU	Defense Acquisition University
DHS	Department of Homeland Security
DLA	Defense Logistics Agency
DoD	Department of Defense
DOE	Department of Energy
DOI	Department of the Interior
DOT	Department of Transportation
EMS	Environmental management system
E.O.	Executive Order
EPA	Environmental Protection Agency
EPP	Environmentally preferable purchasing
FAI	Federal Acquisition Institute
FEC	Federal Electronics Challenge
FPDS	Federal Procurement Data System
GAO	Government Accountability Office
GSA	General Services Administration
LEED	Leadership in Energy and Environmental Design
NASA	National Aeronautics and Space Administration
NRC	Nuclear Regulatory Commission
NRC	National Recycling Coalition
OFEE	Office of the Federal Environmental Executive
OFPP	Office of Federal Procurement Policy
OPM	Office of Personnel Management
PNNL	Pacific Northwest National Laboratory
RCRA	Resource Conservation and Recovery Act
SSA	Social Security Administration
TVA	Tennessee Valley Authority
USACHPPM	U.S. Army Center for Health Promotion and Preventive Medicine
USDA	U.S. Department of Agriculture
USPS	U.S. Postal Service
VA	Department of Veterans Affairs

EXECUTIVE SUMMARY

This report provides an overview of the actions taken by Federal agencies during Fiscal Years (FYs) 2002 and 2003 to implement section 6002 of the Resource Conservation and Recovery Act of 1976 (RCRA), which establishes the buy-recycled component of the Federal green purchasing program. Several key actions taken in FY 2004 are also discussed. Section 6002 also requires Federal agencies and their contractors and grantees to give preference to the purchase of recycled content products identified by the Environmental Protection Agency (EPA).

Section 6002 directs the Office of Federal Procurement Policy (OFPP) to report to Congress biennially on the Federal agencies' compliance with the buy-recycled requirements. Executive Order 13101, "Greening the Government Through Waste Prevention, Recycling, and Federal Acquisition," similarly requires the Federal Environmental Executive to report to the President biennially on Federal agencies' waste prevention, recycling, and green purchasing activities. In an effort to develop a more efficient and less burdensome reporting process, this report consolidates the two reporting requirements. This report was prepared through a collaborative effort by the Office of Federal Procurement Policy and the Office of the Federal Environmental Executive.

This reporting cycle is the first to use a new data questionnaire created by an inter-agency reporting workgroup. After examining the limitations on data available through current Federal procurement data systems, the workgroup recommended that reporting focus on compliance, training, and auditing and trends analyses, rather than on dollars expended on individual EPA-designated recycled content products. Federal procurement data systems do not capture data on the purchase of individual items or on purchases made with credit cards, so the only way to capture data is through a labor-intensive manual process. Since most products available for purchase tend to be more efficient over time, replacement purchases are likely to result in efficiency improvements over time. This cannot be verified by procurement data systems, however. The interagency working group has agreed to report on data on one "indicator" item in each category to demonstrate compliance with the buy-recycled requirements. Under this new approach, the agencies report:

- Data recorded in the Federal Procurement Data System (FPDS) on contracting actions through which EPA-designated products will be supplied or used.
- Data on purchases of eight products – commercial sanitary tissue products, toner cartridges, concrete, landscaping timbers, park benches & picnic tables, traffic barricades, re-refined oil, and signage – that are indicators of compliance with purchasing products in each of EPA's eight categories.
- Waste prevention and recycling activities.
- Pilot purchases of environmentally preferable products.
- Management controls, including affirmative procurement policies, training, auditing, and goals for waste diversion and purchasing.

Report Highlights

This report discusses the FY 2002 and 2003 waste prevention, recycling, and green purchasing activities of the top six Federal procuring agencies: Department of Defense (DoD), Department of Energy (DOE), National Aeronautics and Space Administration (NASA), General Services Administration (GSA), Department of Veterans Affairs (VA), and Department of Transportation (DOT). Several other agencies also voluntarily supplied data for this report.

Programs. Federal agencies continue to have strong recycling programs. The agencies reported that all or nearly all of their offices, sites, and residential housing (where available) have recycling programs (except for GSA, DOT, and VA).

Agencies have been testing and purchasing a variety of environmentally preferable products and services, ranging from the Navy's testing of foam for aircraft rescue and fire fighting vehicles to several agencies' use of green cleaning products and services. Agencies also continued to test and use biobased products, setting the stage for government-wide implementation of the new biobased products purchasing requirements under the Farm Security and Rural Investment Act of 2002.

OFPP and OFEE continue to emphasize green purchasing. Federal purchasers can and do purchase green products consistent with their performance needs and Federal mandates. Through education and outreach, more and more Federal purchasers will understand the benefits of resource conservation.

Purchases. DOE, DOT, VA, GSA, and NASA have been highly successful in creating markets for most recycled content products. Agencies continued to purchase high levels of recycled content paper and concrete containing coal fly ash or ground granulated blast furnace slag. In FY 2003 alone, 98.4 percent of the headquarters offices' purchases of recycled content copier paper through the Government Printing Office contained 30 percent or higher percentages of post-consumer recycled fiber. More than 80 percent of the concrete purchases made by NASA, DOE, and GSA contained coal fly ash or slag.

Purchases of re-refined oil, which on average were relatively low (i.e., at 40 percent or less of total oil purchases), trended upward during the reporting period at all agencies except DOE. However, it is difficult to track and report data on purchases of vehicle maintenance products, which are made with the government fleet purchase card, so actual purchases could be higher. Availability of products and resistance to their use continue to be barriers, however. This problem could increase in the future due to changes in oil specifications that could preclude the use of re-refined oil or limit the percentage of re-refined oil that can be used in the basestock.

Purchases of the other indicator products varied among the agencies, indicating both the variety in what agencies purchase and the difficulty in tracking and reporting data on products that are often purchased with the government purchase card or through support services contracts.

For both FY 2002 and FY 2003, the six agencies reported that, in less than ten percent of contracting actions, EPA-designated products were supplied or used. There are several possible explanations for this low compliance rate. The most likely is that personnel were unaware that the requirement to purchase EPA-designated products applies to support services. Some of the contracting actions were amendments to existing contracts that did not contain recycled content product provisions, rather than new contract actions.

Policies. In 2004, the Department of Defense issued a green purchasing policy incorporating all of the essential components of a Federal green purchasing program. The Office of the Federal Environmental Executive posted Defense's new policy on its web site as a model for other Federal agencies. GSA, NASA, DOT, VA, and DOE had affirmative procurement programs and/or policies in place during the reporting period.

Training. In 2004, the Office of Personnel Management launched an on-line green purchasing training course developed by the Office of the Federal Environmental Executive, in collaboration with the Office of Federal Procurement Policy, the Environmental Protection Agency, and the Department of Energy. Through wide-spread publicity, we expect that many more program and purchasing personnel will become aware of and take the course.

CHAPTER 1: INTRODUCTION

STATUTORY REQUIREMENTS

Section 6002 of the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. 6962, establishes the “buy recycled” component of the Federal green purchasing program. In order to create markets for industrial by-products and for materials recovered in home and office recycling programs, it is Federal procurement policy to purchase products made with recovered materials to the maximum extent practicable. Under RCRA section 6002, the U.S. Environmental Protection Agency (EPA) designates these products and provides recommendations for purchasing them, including recommended percentages of recycled content. Appendix A contains a copy of section 6002.

Section 6002 assigns responsibility to the Office of Federal Procurement Policy (OFPP) to report biennially to Congress on the progress made by the Federal government in implementing this policy. Executive Order (E.O.) 13101, “Greening the Government Through Waste Prevention, Recycling, and Federal Acquisition,” similarly requires that the Federal Environmental Executive report to the President biennially on Federal waste prevention, recycling, and green purchasing activities. In an effort to develop a more efficient and less burdensome reporting process, OFPP and the Office of the Federal Environmental Executive (OFEE) jointly produce a single report on agencies’ waste prevention, recycling, and green purchasing.

Under E.O. 13101, EPA designates the recycled content products in the Comprehensive Procurement Guidelines (CPG) and provides recommendations in Recovered Materials Advisory Notices (RMANs). In the 20 years between 1983 and 2003, EPA designated 54 products or categories of products. EPA designated additional products on April 30, 2004. RCRA requires Federal agencies to amend their affirmative procurement plans and begin purchasing the EPA-designated products within one year after EPA issues final product designations.

Section 9002 of the Farm Security and Rural Investment Act of 2002 (P.L. 107-171) established a biobased products purchasing program similar to the recycled content purchasing program under RCRA. The text of section 9002 can be found in Appendix A. The U.S. Department of Agriculture (USDA) will designate biobased products and provide recommendations for purchasing the designated products. Agencies are required to establish affirmative procurement programs for the products and to report on their purchases for inclusion in a report to Congress. The statute also authorized the creation of a voluntary labeling program of biobased products.

This is the 14th in the series of RCRA Reports to Congress. This report primarily covers agencies’ activities during Fiscal Years 2002 and 2003. The last report, covering FY 2000-2001 was submitted to Congress in January, 2003.

REPORTING METHODOLOGY

As reported in the 2000-2001 Report to Congress and discussed in Chapter 4 of this report, OFPP and OFEE co-chaired an interagency Reporting Workgroup to assess shortcomings, relieve data collection burdens, and provide recommendations for improving agencies' reports on their waste prevention, recycling, and affirmative procurement activities. After examining the limited ability of existing Federal procurement data systems to track data on purchases of recycled content products, and the rising volume of EPA-designated products, the workgroup recommended that reporting should focus on compliance, training, and auditing and trends analyses, rather than on dollars expended on individual EPA-designated recycled content products. This approach should assure greater compliance by addressing accountability for program implementation. Appendix B contains the new reporting questionnaire. For FY 2002 and FY 2003, the top six purchasing agencies reported on their activities using this new report format. Beginning in FY 2004, all agencies will report to OFPP and OFEE using a slightly updated version of this new format. All agencies were alerted in FY 2002 that they would be required to report.

The six reporting agencies for this report are Department of Defense (DoD), Department of Energy (DOE), National Aeronautics and Space Administration (NASA), General Services Administration (GSA), Department of Veterans Affairs (VA), and Department of Transportation (DOT), which in past years had been the largest purchasing agencies and represented more than 85 percent of Federal procurement. During the reporting period, the Coast Guard was moved from DOT to the new Department of Homeland Security (DHS), which dropped DOT from the top six procuring agencies. However, because DOT had provided data for FY 2002, we requested that DOT report for FY 2003 as well. The U.S. Postal Service (USPS), which had reported voluntarily in the past, chose not to submit data for this reporting cycle.

As discussed in Chapter 4, the reporting data are incomplete because not all of the agencies responded to each portion of the questionnaire. DoD, for example, provided limited data about its purchases of eight products that are used as indicators of compliance with the requirement to purchase all of the EPA-designated recycled content products. DoD stated that, because it purchases a large volume of designated products using the purchase card, there is no automated tracking and reporting system for purchase card purchases, and manual tracking of these purchases would be burdensome, it chose to report only on purchases that could be tracked electronically. Therefore, DoD only reported purchases of the two items -- toner cartridges and re-refined oil -- for which purchases could be tracked electronically by the Defense Logistics Agency (DLA) for all DoD components.

Other major reporting agencies also continued to have difficulty in collecting and reporting data. VA is a decentralized agency, which makes accurate data collection difficult. As with DoD, VA purchases many of the EPA-designated recycled content products with purchase cards, making tracking and reporting of purchases extremely difficult because there is no an automated means of recording purchase card purchases of individual products.

However, individual installations and agencies have begun developing means to track purchases made with purchase cards. For example, the Naval Undersea Warfare Division Newport orders office supplies from Office Depot. As part of its contract, Office Depot records and reports on this facility's purchases of the EPA-designated products. In 2004, EPA entered into a blanket purchase agreement (BPA) with Corporate Express for the supply of office products, under which Corporate Express will track and report on purchases of recycled content and environmentally preferable products.

Beyond the major procuring agencies, other Federal agencies are actively involved in implementing green purchasing, waste prevention, and recycling programs. Selected activities of these agencies are highlighted in Chapter 3 of this report.

If you have any comments, suggestions, or questions about the contents of this report, please contact the Office of Federal Procurement Policy at 202-395-3501 or the Office of the Federal Environmental Executive at 202-564-1297.

CHAPTER 2: ACTIVITY REPORT

During 2002 and 2003, both OFPP and OFEE continued to promote the acquisition of “green” products and services, including recycled content, energy-efficient, environmentally preferable, and biobased products, as well as alternative fuel vehicles and non-ozone depleting substances. This Report to Congress addresses activities related to purchasing recycled content, environmentally preferable, and biobased products. It also discusses waste prevention and recycling activities. Some of the major initiatives and programs of OFPP and OFEE are highlighted below.

GOVERNMENT ACCOUNTABILITY OFFICE STUDY

As reported in the 2000-2001 report, during FY 2001 the Government Accountability Office (GAO) reviewed Federal agency implementation of the RCRA reporting and purchasing requirements. The report highlighted the problems with tracking credit card purchases and purchases made by contractors, as well as the difficulty of tracking purchases through the Federal Procurement Data System. Most of these problems were addressed by the changes in the reporting process implemented in FY 2002 and by the agencies’ commitment to train contracting personnel and to audit their programs. The results of the first two years of implementing these changes are reported in this biennial report.

COMPREHENSIVE PROCUREMENT GUIDELINES

In 2001, EPA proposed to designate additional recycled content products. On April 30, 2004, EPA issued a final designation of seven products: bike racks, blasting grit, modular threshold ramps, non-pressure pipe, office furniture, rebuilt vehicular parts, and roofing materials. In addition, EPA expanded the cement and concrete designation and the railroad grade crossing surface designation to include additional recycled materials. EPA also revised the polyester carpet designation to limit it to carpet used in moderate wear applications.

TRAINING

Despite years of outreach activities by OFPP, OFEE, and the various green purchasing programs, agency contracting and program personnel remain largely unaware of the various green purchasing requirements. It is critical to educate these agency personnel, and OFPP and OFEE have continued to offer training and to work with agencies to develop in-house training for their personnel.

OFEE provided “green” purchasing training to hundreds of Federal agency contracting, purchase card, and program personnel. Training was offered in response to agency or facility requests, to attendees to the Defense Acquisition University’s “CON 301, Executive Contracting” course, at the General Services Administration’s GSA EXPO and Federal Acquisition Conferences, and at DoD’s annual pollution prevention conference. In addition, working with the Army’s Center for

Health Promotion and Preventive Medicine (USACHPPM), OFEE developed a train-the-trainer course that OFEE and USACHPPM staff presented to 30 agency environmental and procurement policy staff. Copies of both the OFEE “green” purchasing training and the train-the-trainer training are available in the Green Purchasing section of OFEE’s web site, www.ofee.gov.

OFEE also discussed with the Office of Personnel Management (OPM) the creation of an on-line “green” purchasing course to be offered on OPM’s GoLearn educational website. OFEE partnered with OFPP, EPA, and DOE in developing this course, using funding from OPM and the existing training materials available from OFEE, USACHPPM, EPA’s Environmentally Preferable Purchasing Program, DOE’s Federal Energy Management Program and Alternative Fuels Vehicle Program, the Defense Logistics Agency, and the Air Force’s Center for Environmental Excellence. The courseware consists of modules addressing the statutory, Executive Order, and Federal Acquisition Regulation provisions; the specifics of each component of the Federal green purchasing program; product source information; examples of Federal agency green purchasing successes; and referrals to program and supply source web sites. It is designed to be both fun and informative and to use testing and knowledge checks to reinforce the key learning elements. It was launched in September 2004.

BIOBASED PRODUCTS PROCUREMENT GUIDELINES

During FY 2003, OFPP and OFEE provided guidance and assistance to USDA in establishing the new biobased products purchasing program and encouraged agencies to begin testing, purchasing, and using biobased products. OFEE incorporated information about the buy bio program into its green training program and in the new on-line green purchasing program. In addition, OFEE incorporated biobased products into the annual White House Closing the Circle Awards.

In December, 2003, USDA proposed a framework for the buy bio program, including procedures for designating products, testing products for biobased content, and communicating information through a new web site. The notice also discussed the categories and items that USDA was considering designating. USDA expects to publish the final rule with the framework and begin proposing product designations by the end of 2004.

FAI INSIGHT COLUMN

OFPP and OFEE write a green purchasing column for the Federal Acquisition Institute’s *FAI Insight* newsletter. This is a monthly e-newsletter that is distributed to the Federal acquisition community. Topics covered include an introduction to buying recycled content products, changes to RCRA reporting, training opportunities, greening meetings, green buildings, standby power devices, energy savings performance contracts, and other green procurement topics.

GREENING THE GOVERNMENT REPORT

E.O. 13101 directs the FEE to prepare a biennial report to the President on agency implementation of the “greening the government” executive orders. Working with the Office of Management and Budget, DOE’s Federal Energy Management Program and Alternative Fuels Program, and EPA, OFEE issued the second biennial report in December 2002. *Leading by Example: A Report to the President on Federal Energy and Environmental Management (2000-2001)* discusses Federal agency activities with regard to creation of environmental management systems, “green” purchasing, waste prevention and recycling, market development, energy efficiency, sustainable buildings, and transportation and fleet management. The third biennial report, covering 2002 and 2003, was issued in October 2004.

NATIONAL RECYCLING CONGRESS-FEE EDUCATION PROGRAM

In 2002 and 2003, OFEE and OFPP once again teamed up with the National Recycling Coalition to offer Federal educational sessions during the annual National Recycling Congress. The Federal program offered educational sessions on green purchasing, environmental management systems, green building, and electronics stewardship. NRC offered more than 50 educational sessions on waste prevention, recycling, and green purchasing that Federal employees were encouraged to attend. The Federal employees benefit from the Federal and NRC-sponsored sessions, the extensive exhibit program, and networking opportunities.

EXECUTIVE ORDER 13101 INTERAGENCY ADVISORY GROUP

Created in November 1997, the Executive Order 13101 Interagency Advisory Group (EOIAG) consists of representatives from more than 30 executive branch, legislative branch, and quasi-governmental agencies. It meets monthly to discuss issues associated with implementation of green purchasing, recycling, and waste prevention. It provides a forum to exchange information and ideas, hear presentations by product manufacturers and industry associations, identify needs, and coordinate activities such as participation in America Recycles Day and Earth Day. OFEE also consults with the EOIAG in forming workgroups to identify and address issues needing attention.

AGENCY ENVIRONMENTAL EXECUTIVES AND SENIOR ENERGY AND TRANSPORTATION OFFICIALS

OMB had been hosting periodic meetings (2-4 annually) of the Senior Energy Officials (Assistant Secretary level or equivalent), Senior Transportation Officials and the Agency Environmental Executives. These meetings, which are chaired by the OMB Deputy Director for Management, include a periodic assessment of agency progress as well as reports from individual agencies on recent progress achieved. These meetings also include an educational component so that senior officials, who are accountable for their agency's progress, can be informed on the

latest tools available to assist them in implementing the “greening the government” Executive Orders.

THE WHITE HOUSE CLOSING THE CIRCLE AWARDS

The White House Closing the Circle Awards program recognizes outstanding Federal facility environmental stewardship efforts through the use of environmental management systems, green purchasing, pollution/waste prevention, recycling, and green building. The awards showcase Federal programs and facilities and encourage further endeavors by Federal agencies. The program has had increasing success each year both in the quantity and quality of nominations received. In particular, the quality of the green purchasing programs has expanded to include excellent examples of making it easier to purchase green products; creating infrastructure, such as model solicitation and contract clauses; and incorporating green purchasing concepts into weapon system design and maintenance programs. OFEE showcases the award-winning programs in the summer issue of its newsletter, *Closing the Circle News*, and on its web site in order to encourage facilities to emulate these programs.

AMERICA RECYCLES DAY

Millions of Americans have celebrated America Recycles Day (ARD) on November 15th annually since 1997. This national environmental partnership effort is aimed at increasing recycling and purchases of recycled content products, attracting national media attention, and promoting public support from every sector for recycling and waste prevention. ARD reminds people that setting materials out at the curb is only the first step in the recycling process. They must also look for and buy products made from the materials collected in their home and office recycling programs. Under the umbrella of ARD, businesses, industry, government agencies, schools, and civic and environmental groups organize special events and develop education campaigns and incentive programs.

In 2002 and 2003, OFEE joined with the Washington, DC, Office of Recycling, the Department of the Interior (DOI), the National Park Service, UNICOR, and corporate sponsors to host an electronics collection event. The 2002 event was held on the grounds of the Washington Monument, and the 2003 event was held at Carter Barron Amphitheater. The two events resulted in the collection of eight truckloads of used electronics that otherwise could have ended up in our landfills.

ELECTRONICS DE-MANUFACTURING AND RECYCLING

The Federal Electronics Challenge (FEC) is a voluntary partnership program that empowers federal agencies to manage their electronics in an environmentally sound manner throughout the product's life cycle – from the acquisition and procurement, operations and maintenance, to end-of-life management of these assets. The FEC was developed in 2003 with assistance from OFEE, DoD, DOI, EPA, GSA and the Federal Network for Sustainability. In addition, during the initial pilot phase, pilot partner facilities from DoD, GSA, EPA, DOI, DOE, and NASA gave critical

information to make the program useful for the Federal community. The FEC was launched nationally on October 21, 2004 at the White House Summit on Electronics Stewardship, followed by a Memorandum of Understanding signing ceremony for new agency partners on America Recycles Day, November 15, 2004. Eleven Federal agencies signed the MOU.

SUSTAINABLE DESIGN/GREEN BUILDINGS

Federal sustainable design efforts are a logical extension of our efforts to purchase energy-efficient, recycled content, and environmentally preferable construction products. In 2003, OFEE surveyed Federal agency sustainable design and green building activities. *The Federal Commitment to Green Building: Experiences and Expectations*, identifies significant Federal activities and the barriers to further progress. The Federal government has several key green building policies and tools in place, ranging from the energy-efficiency requirements of the Energy Policy Act of 1992 to the recycled content construction product designations in EPA's Comprehensive Procurement Guideline to individual agency green building policies. However, additional tools and guidance are needed regarding the use of life cycle costing, research into performance of green buildings and specific construction products, and metrics, building on work(s) in progress by many different/diverse Federal agencies. In early 2004, the FEE convened a senior level Federal Green Building Council to develop policies and activities further encouraging greater Federal sustainable design and green building.

In 2002, recognizing that investments in better building design and construction typically return dividends that will save money over the life of the building, OMB revised Circular A-11, Section 55 – Energy and Transportation Efficiency Management – to encourage Federal agencies to incorporate Energy Star® or the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) Green Building Rating System™ into up front design concepts for new construction and/or building renovations. Among other things, the LEED system encourages greater use of recycled content products and construction waste recycling.

CHAPTER 3: SUCCESS STORIES

This chapter highlights just a few of the many Federal agency success stories that occurred in FY 2002 and 2003. Several of the activities described below won White House Closing the Circle Awards for outstanding achievements in recycling, waste prevention, purchasing “green” products, and energy efficiency. All of the success stories serve as examples of environmental innovation and leadership for other Federal agencies.

MAJOR AGENCIES

Department of Defense. Defense Logistics Agency’s Defense Energy Support Center, Virginia, developed contract specifications for ethanol and biodiesel. DESC purchases these two alternative fuels in bulk on behalf of military and civilian agencies, resulting in increased Federal consumption from virtually zero to close to 6 million gallons annually in a span of three years. DESC was also instrumental in the development of the ASTM standard for biodiesel, further increasing Federal purchasing of this fuel.

The **Air Force’s** Patrick Air Force Base, Florida, has an extensive, base-wide recycling program. In FY 2002, the base collected 1,900 tons of recyclable materials ranging from paper and plastic to oil filters and CD-ROMs to hazardous material containers. Recycling 2,500 gallons of engine coolant and 156,000 rags created a savings of \$32,000. Patrick AFB also recycles paint solvents and construction and demolition debris, for an overall solid waste diversion rate of 67 percent.

Similarly, Wright-Patterson Air Force Base, Ohio, has a solid waste and recycling program that collected more than 29 million pounds of solid waste and diverted 9 million pounds away from landfill disposal. The base saved more than \$3 million since 1995 and increased its recyclables by 23 percent per person. The base program recycled six million aluminum cans in its “Kans for Kids” program, which uses revenue from recycling for projects for children. Earnings from "Kans for Kids" funded resurfacing of the playgrounds at the base's childcare facilities using 100 percent recycled materials. In another project, the "Recycling Old Tennies" collection event, old tennis shoes were ground up and used to make footballs, baseballs, and weight room flooring.

Implementation of Wright-Patterson’s affirmative procurement program led to the purchase of more than 100,000 reams of recycled content paper, 3,025 gallons of re-refined oil, retread tires, and 22,000 recycled content desk-side recycling containers. The base used concrete containing coal fly ash to construct an airfield ramp, saving approximately \$300,000 on the cost of the concrete mix materials. As of June 2002, all base diesel-powered military vehicles were fueled with B20 biodiesel, making Wright-Patterson the second Air Force base to use this alternative fuel. The base purchases approximately 20,000 gallons of biodiesel monthly.

Randolph Air Force Base, Texas, went from generating more than 30,000 pounds of hazardous waste annually to less than 5,000 pounds. This 83 percent reduction was the result of innovative strategies to reduce and reuse wastes that would otherwise require costly disposal.

The **Army's** Fort Huachuca, Arizona, implemented a new water management program that aims to have a "zero balance," meaning there is no net withdrawal of water from the aquifer. In order to reach this goal, the base installed waterless urinals, low-flow showerheads and faucets, and horizontal washing machines. It also re-landscaped more than 10 acres of turf. The base reduced its water pumping by eight percent in 2002 and by approximately 50 percent in the nine years of the program's operation. The base saves an estimated \$2,000 per acre-foot of water pumped.

The **Navy's** Naval Sea Systems Command, Washington, DC, implemented the T-AKE Environmental Management System (EMS) to assure that the next class of combat ships and their associated systems and equipment are designed to minimize their impact on human health, safety, and the environment. This is the first DoD acquisition program office to develop and implement an EMS and achieve International Organization for Standardization (ISO) 14001 certification. The EMS integrates programs to monitor and validate a ship's environmental performance in the areas of pollution prevention, hazardous materials management, energy efficiency, environmental protection and compliance, human engineering, and system safety.

The **Navy** revised its specifications for shipboard cleaning products and dispensers. It evaluated (1) what types of shipboard cleaning products and dispensers are needed, (2) the environmental, health, and safety requirements necessary to protect personnel, the ship systems and equipment, and the environment, and (3) candidate commercial cleaning products. The evaluation team developed a new, mandatory catalog that contains a list of authorized shipboard chemical cleaning products (concentrates and ready-to-use products) for general cleaning applications; precautions required for handling, stowage, and disposal of chemical cleaning products; containment requirements for chemical cleaning concentrates; and a list of authorized dispensing systems. The catalog is stored on CD-ROMs and was distributed in 2003 to all of the 209 surface ships in the Navy's fleet.

The pollution prevention program at the Pearl Harbor Naval Shipyard and Intermediate Maintenance Facility, Hawaii, incorporates oil and tire management, construction and demolition waste recovery, and artificial reef enhancement with pollution prevention. By using substitutes for the sulfamic acid used to remove scale and sea growth from shipboard seawater piping systems, the naval yard is able to remove scale and sea growth using only 150 gallons of waste and rinsewater, compared to 4,000 gallons previously. The base recycles more than 10,000 tons of materials annually, saving more than \$800,00 in avoided disposal costs.

The Crane Army Ammunition Activity, a tenant of the Crane Division, Naval Surface Warfare Center, Indiana, had planned on incinerating more than 27,000 marine location markers that failed an acceptance test, at a cost estimated to be more than \$600,000. Instead, the Marine Location Marker Team disassembled the markers and reused many of the parts to create

demilitarized versions of marine location markers. The reuse of more than 52,000 pounds of red phosphorus resulted in a total cost savings of more than \$2.6 million and a project waste diversion rate of 80 percent.

The **Marine Corps** Recruit Depot, Parris Island, South Carolina, replaced the use of chlorine gas with automatic non-gaseous injection systems in all swimming pools. Additionally, Parris Island upgraded its wastewater treatment system and drastically reduced the amount of chlorine and sulfur dioxide used in the treatment processes. In total, the new system reduced chlorine use by 62.4 percent and sulfur dioxide use by 77.5 percent, creating an annual savings of \$42,000.

Department of Energy. In a unique effort, **DOE's** Los Alamos National Laboratory, New Mexico, created a distillation process that recycles nitric acid used for plutonium dissolution and recovery. In its first eight months of operation, the process achieved a 93 percent source reduction in plutonium-contaminated effluent. By April 2002, the Nitric Acid Recovery System had an annual waste stream reduction rate of 99.98 percent and provided 100 percent reduction in radioactive releases to the environment from the treatment of plutonium. The process also resulted in a significant reduction in the number of drums of transuranic waste generated. The return-on-investment is 128 percent on capital costs of \$2 million.

Several of DOE's laboratories have been leaders in purchasing, testing, and using recycled content, biobased, and environmentally preferable products. For example, Sandia National Laboratories, New Mexico, is using blanket purchase agreements for office supplies. In FY 2002, Sandia realized a cost savings of \$154,000 by purchasing remanufactured toner cartridges, which cost less than new replacement cartridges. Additionally, the laboratory sent 10,500 pounds of spent toner cartridges for remanufacturing or recycling. With the new contracts, Sandia increased its use of recycled content paper from 81 percent in FY 2001 to 97 percent in FY 2003. Purchase of other recycled content office products also increased significantly.

The Pacific Northwest National Laboratory (PNNL), Washington, is a leader in the purchase, testing, and use of environmentally preferable cleaning products. In FY 2001, PNNL amended its janitorial contract to require the use of environmentally preferable cleaning products and gave preference to products that used minimal packaging or reusable containers. PNNL subsequently was a participant in a multi-stakeholder effort facilitated by the Center for a New American Dream to create common purchasing specifications for green cleaning products. That effort led to the adoption of Green Seal's GS-37 standard for general purpose, bathroom, and glass cleaners; the development of purchasing criteria for carpet cleaners, disinfectants, floor care, and hand soaps; and the development of additional criteria for desirable characteristics, such as packaging, labeling, training, and dispensing equipment.

Federal Sustainable Building Efforts. Nine Federal agencies use the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) rating system or a similar system for new building construction projects: **GSA, Army, Navy, Air Force, EPA, NASA, National Park Service, Department of State (DOS), and Department of Health and Human Services.** GSA's LEED-certified Youngstown Courthouse, Ohio, project used 62 percent

locally manufactured materials and structural steel with 90 percent postconsumer content. More than half of all construction debris was recycled. To date, 16 Federal buildings received LEED certification, while another 156 are currently seeking certification.

OTHER AGENCIES

The **U.S. Department of Agriculture's** Beltsville Agricultural Research Center (BARC), Maryland, has been a leader in purchasing, testing, and using biobased products. BARC uses biodiesel in more than 150 vehicles and other equipment, its heating plants, and all back-up generators. The center also provides education and outreach about using biodiesel to other Federal agencies and to state and local agencies. In addition, BARC created and implemented an EMS with an all-encompassing pollution prevention program. This new program allowed BARC to reduce the storage of hazardous substances by 50 percent and decrease expenditures for hazardous waste by at least 2 percent per year. The sustainable agriculture section of the program develops environmentally preferable agricultural practices. A recycled water tank system pumps an average of 35,000 gallons daily to be recycled and reused in the central heating plant. BARC also recycles, replaced all ozone-depleting substances, and initiated environmentally and economically beneficial landscaping.

The U.S. Coast Guard Base Support Center Elizabeth City, North Carolina, which is now part of the **Department of Homeland Security**, implemented a pollution prevention program that eliminated 82 percent of hazardous waste and reduced air pollutants by 90 percent. The facility started a hazardous materials pharmacy to serve as a central point for procurement, storage, and issuance of all hazardous materials. It also is using biodiesel in the delivery vehicle used to transport hazardous materials and in other facility equipment.

DOI's Buenos Aires National Wildlife Refuge in Southwestern Arizona developed a waste prevention and recycling program that has grown from a one-person detail to one that involves all refuge personnel. A unique challenge facing the wildlife refuge – one of the few locations in the United States that features African savannah-type habitat – has been coping with the impact of thousands of undocumented aliens crossing through the park annually. Refuge officials estimate that more than 500 undocumented aliens pass through the refuge on a monthly basis near its border with Mexico, and tons of debris and solid waste are left behind in the pristine preserve. In the eight-month span between April 2000 and December 2000, the refuge increased its recycling rate from 17 percent to 40 percent. Since 2000, the refuge has removed and recycled 11 tons of scrap metal, five tons of office materials, 1,200 pounds of aluminum, 700 pounds of plastic, 50 bicycles, and 30 tires.

The U.S. Fish and Wildlife Services' Region 6 office, Colorado, developed a comprehensive, regional affirmative procurement program. The regional office and 20 field stations now use 100 percent recycled content paper. The regional office provided funding to field stations toward financing the purchase of their first barrel of re-refined oil. Additionally, it supported the purchase of recycled plastic shingles for a residence at La Creek National Wildlife Refuge in South Dakota and encouraged the use of recycled plastic lumber at 20 other projects in the region. The regional office also conducted pilot programs to demonstrate the feasibility of engine coolant recycling equipment and also provided guidance to the field stations on recycling items such as fluorescent bulbs, batteries, and light ballasts.

The Chattahoochee Forest National Fish Hatchery, Georgia, reduced the amount of hazardous materials used in daily operations and significantly decreased the threat of contamination of nearby waterways. Hatchery personnel conducted an inventory of the chemicals stored on-site, itemized 200 distinct substances ranging from toxic chemicals to common cleansers, and disposed of outdated and unused products. As a result, the hatchery reduced the storage of chemicals by 60 percent and reduced waste by 50 percent.

The **EPA** Region 3 office, Philadelphia, Pennsylvania, teamed up with electronics manufacturers to recycle residential electronics as part of a pilot program in the Mid-Atlantic States. The project, dubbed eCycling, encourages consumers to recycled end-of-life computers and televisions. Region 3 launched eCycling in October 2001, sponsoring 46 collection events in 35 jurisdictions. The pilot program diverted 2,500 tons of electronics from landfills, including 22,000 cathode ray tubes – the single largest source of contamination from electronics.

In FY 2001, EPA established a Sustainable Facilities Practices Branch to focus on reducing energy usage in EPA offices and laboratories, increasing the use of recycled content, energy-efficient, and environmentally preferable materials in the construction of its facilities, and increasing construction debris recycling. EPA's Research Triangle Park, North Carolina campus, completed in May 2002, is one of the Federal government's first planned and largest "green" buildings. The project used significant amounts of recycled content materials, and the recovery rate for construction debris exceeded 75 percent. The Kansas City, Missouri, Science and Technology Center received a LEED-gold certification. Recycled content materials were used extensively in the construction of the center, and 72 percent of construction debris was diverted to recycling or re-used during construction. The Chelmsford, Massachusetts, New England Regional Laboratory also received LEED-gold certification. The environmental attributes of this laboratory include extensive use of recycled content materials, natural day lighting, energy efficient ventilation systems, and a storm water management system that captures roof rainwater to recharge a nearby wetland. More than half of the construction debris was recycled.

U.S. Postal Service's Alabama District reduced waste generation by 4 million pounds over the course of 18 months through the increased use of paperless communication and better materials management. In July 2001, the District Manager launched a program mandating the use of electronic correspondence and discouraging the printing of hard copies. The district also

implemented new electronic reporting systems for time, travel, and various human resources activities, further reducing paper use.

Other examples of agency success in waste prevention and recycling are found in the next chapter.

CHAPTER 4: DATA COLLECTION AND ANALYSIS

As reported in the FY 2000-2001 report, OFPP and OFEE co-chaired an interagency Reporting Workgroup to assess shortcomings and provide recommendations for improving agencies' reports on their waste prevention, recycling, and affirmative procurement activities. After examining the limited ability of existing Federal procurement data systems to track data on the purchases of recycled content products and the increase in product designations to more than 60, the workgroup recommended that reporting should focus on compliance, training, and auditing and trends analyses, rather than on dollars expended on individual EPA-designated recycled content products. For FY 2002 and FY 2003, the top six purchasing agencies reported on their activities using the new reporting guidance. Beginning with FY 2004, all agencies will report to OFPP and OFEE, using the new reporting guidance.

FEDERAL PROCUREMENT DATA SYSTEM INFORMATION

Agencies purchase the EPA-designated recycled content products directly through supply contracts or purchase cards and/or as part of support service contracts. The Federal Procurement Data System (FPDS) can capture data on purchases made through contracts valued at more than \$25,000. The data are reported through the Individual Contracting Action Form. Beginning with FY 2002, contracting personnel indicated whether EPA-designated products would be supplied or used in the performance of the contract (Code A in the applicable block of the form); if not, the reason for not specifying recycled content – price, performance, or availability limitations (Codes B-D); or whether no EPA-designated products would be supplied or used (Code E).

For both FY 2002 and FY 2003, the six agencies reported that, in more than 90 percent of contracting actions, contracting personnel checked Code E, indicating that no EPA-designated products would be supplied or used. Tables 1 and 2 provide the data reported by each agency.

Table 1. FY 2002 Federal Procurement Data System Information Regarding the Purchase of EPA-Designated Recycled Content Products (% of Contracting Actions Reported)

	DoD	DOE	NASA	GSA	VA	DOT
Code A	2.7	6.0	0.01	1.8	0.05	2.0
Code E	96	96	99.6	98	92	84

Table 2. FY 2003 Federal Procurement Data System Information Regarding the Purchase of EPA-Designated Recycled Content Products (% of Contracting Actions Reported)

	DoD	DOE	NASA	GSA	VA	DOT
Code A	3	5	0.5	1	0.6	1.6
Code E	96	93	99.4	29	97.6	98

In FY 2003, GSA reported that for half its contracting actions, no EPA-designated products were supplied or used because of lack of availability. These data are suspect because the designated products are commercially available off-the-shelf products and because GSA is one of the major sources of supply for the Federal government. If other agencies were able to find the products, then it is reasonable that GSA could find them available as well.

There are several potential factors impacting the low percentage of contracts specifying the use of EPA-designated recycled content products:

- Because the guidance for completing these data elements was not posted until the end of FY 2002, contracting officials did not understand how to complete the forms correctly.
- Some of the contracting actions are for supplies or services – such as electronics hardware and software – in which no EPA- designated products will be purchased, supplied, or used. However, many of these contracts require the contractor to submit reports or documentation, all of which should be printed on 30 percent postconsumer content paper as required by RCRA section 6002, Executive Order 13101, and the Federal Acquisition Regulation.
- Contracting personnel were unaware that the requirement to purchase EPA-designated products applies to support services contracts. They focus on the fact that these contracts supply labor hours, rather than on the fact that products will be supplied or used. For example, DoD’s FY 2002 FPDS data for janitorial services contracts indicates that no EPA-designated products will be supplied or used in more than 95 percent of the contracts. Yet, janitorial services contracts include the supply of replacement plastic trash bags, paper towels, and toilet tissue in restrooms, all of which are EPA-designated recycled content products under RCRA.
- According to DoD, purchases of most of the EPA-designated products are low dollar transactions made with the government purchase card, and these transactions are not reported in the FPDS.
- Purchases by DOE’s management and operations contractors, who account for the bulk of the agency’s purchases of the EPA-designated products, are not reflected in FPDS data.

- NASA found that 38 percent of actions occurring in FY 2002 and 55 percent of FY 2003 contracting actions related to contracts written before FY 2002 or 2003. The FPDS data for construction contracts, for example, are inaccurate for awards made after NASA revised its construction specifications, SPECSINTACT, to be compliant with the buy-recycled program requirements.

Consistent with the RCRA requirement that agency affirmative procurement programs include annual review and monitoring of the agency's buy-recycled program, OFPP and OFEE asked agencies to review their FPDS data for trends. Several of the agencies did so. As a result of the reviews, Air Force, DOE, and VA took actions to improve compliance by providing training to the contracting community. Specifically:

- Several Air Force units established affirmative procurement focal points, initiated training programs, periodically published articles in their newsletters, and required squadron commanders to brief the affirmative procurement program to the commander on a quarterly basis. Air Force also issued guidance to the civil engineering community regarding how to apply the buy-recycled requirements to service and construction contracts.
- The Navy notified installation commanders about their installation's performance in order to increase the use of the EPA-designated products.
- In both FY 2002 and FY 2003, DOE's Green Acquisition Advocates and Procurement Data Coordinators provided supplemental training to contract specialists at each facility regarding the products and the contract clauses and will continue to monitor FPDS reporting.
- DOE also continues to host quarterly conference calls for its recycling coordinators and green acquisition advocates to discuss affirmative procurement issues, such as the availability and performance of EPA-designated products, and continues to find new ways to increase compliance.
- Although its purchasing is decentralized, VA provided additional green purchasing guidance to key individuals at field facilities. VA also planned to enhance training through the use of seminars, conferences, web-based programs, and periodic conference calls. OFEE provided several training workshops for VA purchase card holders and contracting personnel.

GSA and DOT did not review their data. In FY 2002, GSA stated that it did not review its FPDS data for trends because it was establishing a baseline and creating an assessment program. In FY 2003, it reported that it was assessing the data to determine trends and identify areas for improvement. In FY 2002, DOT reported that it had not yet implemented a review program. In FY 2003, it reported that the U.S. Maritime Administration reviewed its FPDS data; no information was provided for the other DOT administrations, indicating a lack of an overall, DOT-wide assessment program.

PURCHASES OF COPIER PAPER THROUGH THE GOVERNMENT PRINTING OFFICE

Most of the agencies in the Washington, DC area purchase bulk quantities of copier paper through the Government Printing Office. In FY 2002, 92 percent of the paper purchased was recycled content copier paper. In FY 2003, a whopping 98.4 percent was recycled content paper.

Why do Federal agencies still purchase some virgin copier paper? First, in FY 2002, a few bureaus of the departments and several of the smaller agencies purchased virgin paper from GPO. The non-compliance was corrected following inquiries from OFEE. Second, agencies purchase 8 ½ x 14 paper, 3-hole punched paper, and colored paper, as well as standard 8 ½ x 11 copier paper. While several agencies purchased these types of copier paper with recycled content, others purchased virgin content paper in FY 2002. In FY 2003, most of the colored paper purchased continued to be virgin paper due to the higher cost of recycled content colored paper.

INDICATOR CPG PRODUCTS

The Reporting Workgroup recommended that agencies report on eight indicator products – one from each of the eight categories in which EPA designates recycled content products. Reporting on these products would indicate compliance with purchasing products in each category. The workgroup members selected products which most agencies purchase and which they believed they would be able to track and report. For FY 2002-2003, the six agencies reported on their direct purchases of the following eight products:

- Paper and Paper Products – commercial sanitary tissue products
- Non-Paper Office Products – remanufactured toner cartridges
- Construction Products – concrete
- Landscaping Products – landscaping timbers
- Park and Recreation Products – park benches and picnic tables
- Transportation Products – traffic barricades
- Vehicular Products – re-refined oil
- Miscellaneous Products – signage

Agencies report on their direct purchases of these eight products from vendors and do not include data reported by GSA and DLA on agency purchases from the stock programs. Table 3 provides the agencies' FY 2002 and FY 2003 data on their purchases of the indicator products, presented as the percentage of the total purchases that contained recycled materials. For each product, the 2002 and 2003 data are presented in an X/Y format, where X is the 2002 percentage of total purchases of that item that contained recycled content, and Y is the 2003 percentage of

total purchases of that item that contained recycled content. “V” indicates that only virgin content products were purchased, and “N.P.” indicates that the agency did not purchase that product at all.

For FY 2002, DLA reported its purchases of tissue products, concrete, landscaping timbers, park benches and picnic tables, traffic barricades, and signage. Without the DLA data, DoD’s reported data for all of these products would be zero. For FY 2003, given the huge volume of purchases using the purchase card, DoD chose to report only on purchases that could be tracked electronically. Therefore, DoD reported purchases only of the two items -- toner cartridges and re-refined oil – that can be tracked electronically by DLA for all DoD components.

It also should be noted that the percentages shown in Table 3 were calculated based on the following formula: recycled content purchases/total purchases of each product. However, agencies are not required to purchase recycled content products if those products are not reasonably available, do not meet their reasonable performance needs, or are only available at an unreasonable price. When the total purchases (the denominators) are adjusted by deducting purchases falling into one of these limitations, the percentages of recycled content purchases increase. Because DOE currently is the only agency reporting the adjusted percentages, we did not use adjusted data for any of the agencies.

Table 4 provides the FY 2002 and FY 2003 data on agencies’ purchases of indicator products from GSA, presented as the percentage of the total purchases that contained recycled materials.

Table 3. FY 2002 and 2003 Agency Purchases of the Eight Indicator Products (% of Total Purchases of Each Product)

	DoD	DOE	NASA	GSA	VA	DOT
Tissue products	81/0	93/94	99/94	92/87	58/62	100/18
Toner cartridges	62/100	59/68	75.5/70	11/8	56/52	82/46
Concrete	17/0	88/87	75/87	11/91	31/8-26*	52/Inc.
Landscaping timbers	V/0	N.P./95	V/38	100/85	99/99	N.P
Park benches and picnic tables	V/0	79/45	100/100	Inc./77	91/73	N.P
Traffic barricades	69/0	100/87	91/99	3/96	64/68	37/N.P
Oil	33/26	50/73	40/43	Inc/Est.	20/34**	V/N.P.
Signage	19/0	67/82	8/42	15/3	15/6**	V/.03

Notes: 0 – DoD did not report purchasing data for these indicator items.

V – all of the products purchased were virgin content products.

N.P. – not purchased

Inc. – DOT provided incomplete information.

Est. – Most of GSA's purchases of replacement oil are made as part of vehicle maintenance services obtained at commercial service stations using the Voyager (fleet) purchase card. As with data from other purchase card purchases, Voyager card data do not include the products purchased, let alone the amount of re-refined oil purchased. GSA facilities estimated that they purchased \$182,148 worth of re-refined oil in FY 2003.

* – Agencies had the option of reporting dollars spent, cubic yards purchased, or contract awards. VA reported all three, depending on what type of information was received from VA's facilities. When dollars were reported, only 8% of the concrete contained recycled materials. When cubic yards were reported, 15% of the concrete contained recycled materials. When number of contracts were reported, 26% of the concrete contained recycled materials.

** – Incomplete data.

Table 4. FY 2002 and 2003 Agency Purchases From GSA (% of Total Purchases of Each Product)

Indicator Item	Agencies' Purchases
Tissue products	77/.19
Toner cartridges	.48/3
Concrete	0/0
Park benches and picnic tables	N.R./0
Traffic barricades	N.R./100

Notes: The cement in the Federal Supply Service supply system is typically packaged and sold as pure cement, which is then mixed with aggregate, fillers, and other additives by the using activity. In FY 2002, GSA did not report data on agencies' purchases of park benches, picnic tables, and traffic barricades. However, GSA reported that agencies purchased nearly \$500,000 worth of recycled content traffic cones.

Because DoD, the largest Federal purchasing agency, did not report data for six of the eight products, it is difficult to assess the impact of Federal purchasing in creating and sustaining markets for the products. With the exception of re-refined oil, toner cartridges, and signage, the other agencies are doing an excellent job of creating markets for recycled content products.

Availability of re-refined oil continues to be a problem for Federal purchasing agencies. In the future, this problem might increase due to changes in oil specifications that could preclude the use of re-refined oil or that could limit the percentage of re-refined oil that can be used in the basestock.

Several facilities noted that remanufactured toner cartridges are not available for color equipment, were not available for the newest models of equipment, and cannot be used in Xerox equipment. This last issue is not correct. Having previously discussed and resolved it with Xerox, OFEE contacted Xerox and resolved it again.

Finally, facilities were not able to find signage for specific needs, such as aerial marking signs or certain types of safety signs. VA facilities also noted that GSA vendors did not offer recycled content signs.

AFFIRMATIVE PROCUREMENT PROGRAMS

Agencies reported on the management controls they've instituted to implement the affirmative procurement requirements of RCRA section 6002, including policies, training of contracting officials and purchase card holders, audit programs, and goals.

Affirmative Procurement Policy

RCRA section 6002 and Executive Order 13101 require agencies to establish affirmative procurement programs for purchasing the EPA-designated products. In FY 2002 and 2003, the six agencies reported on the following aspects of their programs:

- Does the agency have a documented policy or procedure for implementation of the affirmative procurement program?
- Does the policy define responsibility for conducting training, incorporating affirmative procurement requirements into specifications and contracts, establishing and measuring progress, reporting progress, and management review?
- Is the policy routinely updated, is it current, and has it been updated within the past three years?

Table 5 presents the agencies' FY 2003 responses to these questions. For the most part, the agencies have affirmative procurement plans, policies, and procedures. During the FY 2002-2003 reporting period, DoD did not have an agency-wide affirmative procurement plan; however, a comprehensive green purchasing policy was issued in late summer of 2004. Of the military components, the Navy, Air Force, and Defense Logistics Agency have plans, policies, and procedures, but the Army does not. Although there is an Army policy requiring that installations have affirmative procurement programs, recent Army audits revealed that most Army installation do not have programs.

Training

In order for implementation of affirmative procurement to be effective, both the requesters (e.g., facility and program personnel) and the purchasers (e.g., contracting officers, contracting specialists, purchase card holders) must be aware of the requirement to purchase EPA-designated products. Training is particularly important for purchase card holders because the quantity of purchase card purchases is increasing and, as noted earlier, there are no automated mechanisms to track purchases of the EPA-designated products made by a purchase card.

Agencies responded to the following questions about training:

- Who is responsible for conducting training?
- What percentage of acquisition personnel have documented affirmative procurement training within the past three years?
- Who actually provides training – agency personnel, outside sources, or both?
- What percentage of purchase card holders have documented affirmative procurement training within the past three years?

Table 5. Affirmative Procurement Policies and Procedures

	Policy or procedure	Training responsibility defined	Specs and contracts revisions	Measuring progress	Reporting progress	Management review	Update requirement	Policy updated	Updated within past 3 years
DoD									
Army	N*	N**	N	N	N	N	N	N	N
Navy	Y	Y	Y	N***	Y	Y	Y	Y	Y
Air Force	Y	Y	Y	N***	Y	Y	N	N	Y
DLA	Y	Y	Y	Y	Y	Y	Y	Y	Y
DOE	Y	Y	Y	Y	Y	Y	Y	Y	Y
NASA	Y	Y	Y	Y	Y	Y	Y	Y	Y
GSA	Y	Y	Y	Y	Y	Y	Y	Y	N
VA	Y	Y	Y	Y	Y	Y	Y	Y	Y
DOT	Y	Y	Y	Y	Y	Y	Y	Y	Y

Notes: * – AR 200-1 states that installations will have affirmative procurement programs.

** - CHPPM provides training but has never been formally given that responsibility.

*** - Navy is waiting for the development of DoD-wide metrics for affirmative procurement. In September 2003, the Air Force just issued a revised guide for contracting officers.

Responsibility for conducting training varies among the agencies and includes agency schools, the Defense Acquisition University, and environmental program personnel. Training has been provided by these sources, contractors, and OFEE. OFEE and the Defense Office of Acquisition and Procurement Policy worked with DAU to integrate affirmative procurement concepts into several of its courses, including purchase card holder training.

OFPP and OFEE have been vigilant in assessing training programs for inclusion of information on green purchasing requirements. In FY 2004, OFEE discovered that a GSA schedules contractor offering purchase card training had no information about green purchasing in its course. OFEE worked with the vendor to add green purchasing provisions. In the summer of 2003, VA, with assistance from OFEE, provided materials to GSA for inclusion in its web-based SmartPay Card Program training for purchase card holders. GSA incorporated the materials in January 2005. Other parts of GSA, such as the Federal Acquisition Institute have provided opportunities for green purchasing training through the Lunchtime Learning Seminar program and the *FAI Insight* newsletter. OFPP and OFEE will continue to work with GSA to ensure that appropriate coverage of green purchasing is provided in its training program.

In 2004, VA created a green purchasing brochure for purchase card holders. Not only was the brochure distributed widely within VA, it was shared with the other agencies for their use and posted as a tool in the green purchasing section of OFEE's web site. Table 6 presents the reported percentages of agency acquisition personnel and purchase card holders that received affirmative procurement training within the past three years. It presents FY 2003 data only, because the FY 2002 data were incomplete.

Table 6. Percentages of Agency Personnel With Documented Affirmative Procurement Training Within the Past Three Years

	Acquisition Personnel	Purchase Card Holders
DoD	9	47
DOE	100	100*
NASA	30	59
GSA	25	100
VA	51	23**
DOT	90	90

Notes: The Army's CHPPM has conducted onsite training for Army installations since 2000, on its own initiative.

The Air Force data are incomplete because documentation is maintained in personnel files at the local installation and, therefore, is not readily available. However, Air Force personnel must complete a minimum of four hours of training prior to issuance of a purchase card, and buying EPA-designated products is a mandatory element of the training. In addition, the Defense Acquisition University was unable to provide Air Force with the number of personnel who had completed affirmative procurement or purchase card training.

The Air Force Center for Environmental Excellence offers an on-line affirmative procurement training course, which describes affirmative procurement requirements and installation level responsibilities.

DAU's purchase card training was not revised to incorporate adequate information about affirmative procurement until FY 2003. Prior to then, there was only a brief mention of affirmative procurement. Therefore, only those purchase card holders taking the DAU course recently have received adequate training about buying the EPA-designated products.

* – Affirmative procurement is part of the biennial refresher training.

** In addition to classroom training, VA has educated purchase card holders about the requirement to purchase EPA-designated products through conference calls, electronic messages, and distribution of an affirmative procurement brochure.

Auditing

The agencies agreed to assess their FPDS data to look for trends and problem areas and to conduct audits of their facilities for compliance with the affirmative procurement requirements. The reporting agencies responded to the following questions:

- What percentage of facilities conducted and documented contracting and/or environmental audits for affirmative procurement compliance?
- Does the agency conduct trend analysis of audit, training, and FPDS data to assess affirmative procurement program effectiveness?
- What types of trends are realized?

- Are audit findings report to senior facility management?
- Does senior facility management track corrective actions from these audit findings?

As shown in Table 7, during FY 2002 and 2003, the six agencies reported that from 0 to all of their facilities conducted and documented audits for affirmative procurement compliance. Most are conducting trend analysis, with the notable exception of the Army and DOT. NASA has started trend analyses, particularly focusing on the FPDS data. Only the Air Force, DOE and VA reported trends identified. All but DOT report audit findings to senior facility management and track corrective action.

Table 7. Auditing Compliance With Affirmative Procurement (FY 2002 and FY 2003)

	Facilities Documenting Audits (%)	Trends Analyses Conducted	Findings Reported to Facility Senior Management	Corrective Action Tracked
DoD				
Army	9/NP	N/N	Y/Y	N/Y
Navy	67/61	Y/Y	Y/Y	Y/Y
Air Force	100/100	N/Y	Y/Y	Y/Y
DLA	33/69	Y/Y	Y/Y	Y/Y
DOE	NP*	Y/Y	Y/Y	Y/Y
NASA	38/46	N/FPDS only	Y/Y	Y/Y
GSA	0/0	N/Y	N/Y	N/NP**
VA	0/.5	N/Y	N/Y	N/Y
DOT	0/0	N/N	N/N	N/N

Notes: Army reported that 30 facilities conducted audits. The results of these inspections indicate that most installations do not have affirmative procurement programs and are not fully implementing affirmative procurement.

* – Each DOE contracting activity is required to complete a procurement self-assessment which includes affirmative procurement measures every three years.

** - GSA is putting a process in place.

Goals for Buying Recycled Content Products

Executive Order 13101 requires agencies to establish goals to increase their purchase of the EPA-designated recycled content products. DoD’s proposed goal is 100 percent compliance. Both Navy and DLA have a 100 percent goal; Army and Air Force do not. DOE, GSA, VA, and DOT have a goal of 100 percent procurement of the EPA-designated products, assuming that

there are no price, performance, or availability limitations. NASA's goal is 100 percent compliance by 2010.

Environmentally Preferable Products and Services

Executive Order 13101 directs Federal agencies to conduct pilot projects to purchase environmentally preferable products and services (EPP). These are products or services with a lesser or reduced impact on human health and the environment compared to competing products. Agencies already had been seeking such products as part of their waste minimization and pollution prevention programs. For FY 2002 and 2003, agencies were asked whether they participated in an EPP pilot project.

Of the military services and DLA, only the **Navy** reported participating in a pilot project in FY 2002. It tested a foam for aircraft rescue and fire fighting vehicles. In FY 2003, only the Army reported participating in an EPP pilot. It tested a hazardous materials data system.

Seven of **DOE's** laboratories and field facilities reported participating in a pilot EPP purchase in FY 2002. These include Argonne National Laboratory-East's development of a sustainable design implementation plan that promotes environmentally preferable building materials, the Pacific Northwest National Laboratory's testing of paints, the Princeton Plasma Physics Laboratory's use of remanufactured inkjet cartridges, Sandia National Laboratory's purchase of alternative fuels vehicles and other alternative modes of transportation, and the West Valley Demonstration Project's testing of biobased janitorial products. DOE also plans to implement a biobased products purchasing program in FY 2004.

In FY 2002, NASA's Ames Research Center tested processed chlorine free, 100 percent postconsumer content copier paper. As a result, it has committed to increasing the use of this paper to 10 percent of the total paper used at the center by 2005. In FY 2003, it conducted a green copier paper training program to increase the usage of this paper.

In FY 2003, Johnson Space Center (JSC) reported that it is now using human hair cuttings, in place of chemicals, to deter deer from eating plants on-site. Cuttings from a beauty salon are spread around the base of trees and shrubs to deter the deer. JSC's grounds maintenance contractor also is using a biodegradable, water-soluble product containing orange peel extract instead of traditional pesticides.

Langley Research Center initiated a biodiesel fuel initiative and now fuels various trucks, equipment, and engines with B20, a blend of 20 percent biodiesel and 80 percent conventional diesel. Other NASA facilities are also experimenting with the use of biodiesel, ethanol, and compressed natural gas.

In FY 2002, **GSA** requested that janitorial contractors switch to cleaning products lower in volatile organic compound content. It also began a partnership with NISH affiliates to increase the use of environmentally preferable janitorial cleaning products. In addition, GSA is

specifying green products, including environmentally preferable products, in its construction contracts.

Although no new pilots were conducted in FY 2002, the Veterans Health Administration planned to partner with EPA in a biobased cleaners/biothreat/toxic mold remediation pilot project. The partnership began in September 2003, as part of EPA's Hospitals for a Healthy Environment Program. Its goals include increasing purchases of recycled content and environmentally preferable products and the continued reduction of purchases of mercury-containing products. Currently, the Biobased Manufacturers Association is auditing VHA facilities for opportunities to switch to biobased products.

None of the **DOT** administrations reported participating in an EPP pilot in FY 2002. In FY 2003, the Federal Aviation Administration reported that one of its buildings was constructed as a pilot project using recycled content, energy efficient, and environmentally preferable construction products.

WASTE PREVENTION

All of the agencies reported implementing new or substantially improved solid waste prevention practices in FY 2002 and 2003.

In FY 2002, the **Army** began using the SWAR web-based reporting system to improve solid waste tracking. **Navy** updated the solid waste chapter of OPNAVINST 5090.1B. The **Air Force** issued construction and demolition debris guidance to its major commands to ensure the accurate reporting of solid waste diversion. One of **DLA's** activities improved grease traps in its food service area in order to divert greater amounts of grease, and another activity began recycling computer equipment.

In FY 2002, **DOE** facilities implemented a variety of waste prevention projects.

- Argonne National Laboratory-East performed waste assessments on high volume/high cost waste generators to identify waste prevention opportunities. Similarly, the Princeton Plasma Physics Laboratory conducted detailed waste assessments to identify recycling opportunities.
- Argonne also created a Surplus Office Supply Exchange for office supplies and furniture and an Equipment and Materials Exchange for surplus equipment, supplies, and materials.
- Brookhaven National Laboratory recycled asphalt back into new pavements.
- Other facilities expanded their recycling programs, including construction and demolition debris recycling; reduction in waste from site cleanups; reuse and recycling of spent inventories of hazardous materials; donations of computers to schools; donations of eyeglasses and hearing aids; battery and pallet recycling; and wood waste recycling.
- The Pacific Northwest National Laboratory also found markets for non-conventional recyclables, such as sending 16 metric tons of lead bricks to NASA, selling more than 15

metric tons of used non-radioactive graphite blocks, and using tumbleweeds in sand drift control. PNNL also instituted ChemAgain, a chemical re-distribution program.

- The Strategic Petroleum Reserve replaced battery-powered lighting with solar-powered lighting for barricades and implemented paint waste minimization actions.

In FY 2003, DOE convened a waste reduction workgroup, comprised of representatives from headquarters and field offices, to compile lessons learned from successful pollution prevention projects and past practices. The workgroup's report, *Waste Reduction Accomplishments Revitalization Initiative*, highlights 35 successful projects and practices that can be implemented at other sites. The report can be found at www.eh.doe.gov/oepa/guidance/p2/p2bestpractices.pdf.

In FY 2002 and 2003, **NASA** facilities implemented a variety of projects, including the purchase and use of biobased products and biobased fuels, expanded recycling programs, and recycling of construction and demolition debris. For example, the Johnson Space Center conducted baseline studies of solid waste and recycling practices in order to look for increased recycling opportunities. The White Sands Testing Facility diverted 30 tons of gravel roofing material to be used for facilities projects on site and reused nine tons of concrete to create an engineered fill berm at the base firing range. The Kennedy Space Center diverted 1,850 cubic yards of bulk wood waste by processing it into mulch and using it for a landfill cover. The Marshall Space Flight Center is chipping solid foam in order to reuse and recycle it.

GSA headquarters and regional offices focused on construction waste recycling. GSA created a database of construction waste recyclers and is incorporating construction waste management plans into construction, modernization, and demolition projects to maximize the amount of building materials salvaged or separated for recycling. The database can be found on-line at <http://www.wbdg.org/tools/cwm.php>. GSA also implemented pallet recycling.

VA facilities shared excess inventories and expanded composting and recycling programs. The VA cemeteries implemented construction and demolition debris recycling. In addition, the cemeteries now design graded areas to minimize the use of materials and the related generation of excess materials requiring disposal.

In FY 2003, several of **DOT's** administrations expanded recycling programs, including programs for electronics and mercury switches. The SLSDC began purchasing re-usable blast grit as an alternative to conventional products.

Other agencies also reported innovative waste reduction efforts.

- In FY 2002, the **State Department** began a pallet recycling program and researched the possibility of creating a program for all of the Federal agencies in the Washington, DC metropolitan region.
- In FY 2002, **EPA's** regional offices and laboratories reported expansion of their recycling programs.

- **Tennessee Valley Authority (TVA)** uses “Winning Performance” indicators at the facility level. These indicators drive performance award payouts. By reducing the amount of solid waste generated, employees increase the amount of money available for performance awards. TVA also is partnering with USPS’s Alabama regional office and local governments in Tennessee to facilitate recycling of additional types of materials.
- At the **Nuclear Regulatory Commission (NRC)**, unneeded supplies are returned to the supply store for reuse. NRC placed containers throughout the building for employees to place unneeded supplies and used laser toner and ink jet cartridges for recycling. NRC also donates computers to schools, unneeded furniture and equipment to others, and unconsumed food from the cafeteria to a local food bank. In addition, NRC implemented electronic systems for recordkeeping and communications, leading to a decline in paper usage.
- **Social Security Administration (SSA)** expanded its toner cartridge recycling program by providing its offices with prepaid mailers.

RECYCLING PROGRAMS

The three largest procuring agencies reported that all or nearly all of their offices, sites, and residential housing (where available) have recycling programs, as shown in Table 8. Waste diversion rates varied from 1.3 percent to nearly 50 percent. (The Coast Guard’s move from DOT to Homeland Security during the reporting period significantly affected DOT’s waste diversion and recycling rates.) Most of the agencies reported an increase in diversion of solid waste and recycling of materials from construction and demolition debris. They also reported increased usage of composting facilities, which further removes organics from the waste stream and thereby, contributes to greater sequestration of carbon and reductions in the emissions of greenhouse gases.

In FY 2002 and 2003, several other agencies voluntarily reported on their recycling activities.

- In FY 2002, the **State Department** reported that eight out of ten of its offices and sites have active office products recycling programs. State also reported a 30.5 percent recycling rate.
- **EPA** reported that the majority of its laboratories and offices had active recycling programs in FY 2002. While it did not report an overall agency recycling rate, several of its laboratories and regional offices reported recycling rates ranging from 21 to more than 90 percent.
- **NRC** continues to recycle a broad range of materials, including various grades of paper, metal, plastic, and glass beverage containers, pallets, fluorescent bulbs, laser toner cartridges, ink jet cartridges, and batteries. The latter two items were added in FY 2002. The recycling program generated more than \$200,000 in revenue since 1996. NRC also established a “Green Team” of volunteers working together to encourage recycling.

- In FY 2002, the **National Security Agency** reported that the entire agency participates in its “Goldmine” recycling program. The agency diverted more than half of its waste, and all demolition projects included construction debris recycling.
- The **Office of Personnel Management** recycled an estimated 67.725 tons of paper in FY 2002 and 60 tons in FY 2003. It also recycled aluminum, plastic, and glass beverage containers and toner cartridges.
- The **Railroad Retirement Board** recycled 33 percent of its waste stream in FY 2002.
- **SSA** reported that it recycles slightly more than 5 percent of its waste stream.
- **TVA** diverted 57 percent of its waste stream, including construction and demolition debris, in FY 2002, and 47 percent of its waste stream in FY 2003.

Table 8. Recycling In FY 2002 and 2003

Agency	Percentage of offices/sites with recycling programs	Percentage of residential housing with recycling	Percentage of demolition projects including recovery of construction materials	Percentage of solid waste diverted to recycling	Number of sites or facilities with composting programs
DoD	85/88	93/60	63*/51	49/48	48/85
DOE	79/87	100/100	54/20	53/50**	3/19
NASA	100/100	N.A.	82/36	15/23	1/2
GSA	31/40	N.A.	72/64	47/25	2/3
VA	75/44***	32/31	N.A./21	N.A./35	21/25
DOT	90/47	50/100	40/100	****/1.3	*****/0

Notes: *In FY 2002, only Navy and Air Force reported data.

**DOE includes sanitary waste and construction and demolition debris in its data.

***The increased number of remote clinics included in the FY 2003 reporting period significantly affected the percentage of VA recycling programs. Many of these remote clinics are removed from the medical center and may not have access to or be involved in a recycling program.

****In FY 2002, DOT reported that the majority of the Operating Administrations did not know their recycling rate. The Maritime Administration estimated a 90 percent recycling rate, and the Federal Aviation Administration estimated a 75 percent rate.

*****In FY 2002, DOT reported that the Coast Guard had composting facilities, although the number of facilities was not reported.

CHAPTER 5: CONCLUSIONS

PROGRESS

The Federal government continued to make strong progress in increasing its purchases of recycled content and other products with energy and environmental attributes. During the FY 2002-2003 reporting cycle, OFPP and OFEE implemented a new tracking and reporting system that focuses on program implementation, auditing, and assessment in order to continue and expand compliance. We learned that, as Federal procurement techniques have changed, changes in outreach and training are needed in order to promote the continued purchase of green products using the new techniques. In particular, OFPP and OFEE expanded their emphasis and training to include purchase cards and support services contracts.

OFPP and OFEE also expanded their approach from a focus on individual components of the Federal green purchasing program to working with agencies to implement the program as a whole. Web-based and classroom-based training materials now emphasize that the Federal green purchasing program has seven components, including recycled content, energy efficiency, alternative fuel vehicles, biobased, environmentally preferable, non-ozone depleting substances, and priority chemicals. Each component of the overall program will be implemented more successfully as Federal product specifiers and purchasers recognize that green purchasing applies to the range of purchases from office supplies to maintenance and operations to fleet vehicles/fleet maintenance to building construction, renovation, and maintenance.

A TWENTY-YEAR PERSPECTIVE

It has now been more than 20 years since EPA designated the first recycled content product. The program has grown to include more than 60 products or product categories. Several important lessons will govern the Federal communities' activities over the next several years to make the Federal green purchasing program even more successful.

- A statute, executive order, or policy is not enough to create a program. The concept of green purchasing needs to be incorporated into:
 - Individual agency policies and procedures
 - Purchasing regulations – the Federal Acquisition Regulation, agency supplements, OFPP policy memoranda, and other policy directives
 - Solicitation and contract templates or clauses
 - Contracting forecasts
- Outreach, education, and training are needed on an on-going basis and must evolve as purchasing practices change, personnel change, and examples of purchasing successes and best practices are identified.

- As procurement techniques change, green purchasing must change. It is important that recommendations from EPA, DOE, and USDA about purchasing recycled content, energy efficient, biobased, and other green products include guidance on purchasing these products when using purchase cards, support services contracts, and performance based service acquisition.
- OFPP and OFEE will continue to emphasize that green purchasing is consistent with agency mission, can be done cost effectively, can often save money, and conserves resources. The Federal government has examples of environmentally preferable products purchased for Navy submarine manufacture and operation, non-ozone depleting propellants for Air Force missiles, alternatives to ozone depleting substances for cleaning NASA equipment, renewable energy powering military installations and Federal laboratories, a large Federal fleet of alternative fuel vehicles, and a hybrid Humvee.
- Federal purchasers can and do purchase green products consistent with their performance needs and with Federal mandates to purchase from small, minority-, women-owned, and service-disabled veteran-owned businesses; the blind and severely disabled; and prison sources. Green purchasing also is consistent with the Federal effort to purchase commercial off-the-shelf items and to purchase from commercial sources. Federal agencies routinely purchase green products from office supply vendors, office electronics vendors, and vehicle suppliers and vehicle maintenance shops, and green products are supplied and used as part of construction, janitorial services, fleet maintenance, landscaping, and other support services contracts.
- As agencies create and implement green purchasing programs, it is important that the managers of the individual programs coordinate with one another to avoid conflicting product designations and guidance. This will be particularly important as the new biobased products purchasing component is implemented. OFPP and OFEE will encourage the programs to coordinate their efforts.
- It is easier to promote the concept of green purchasing when agencies can see a tangible benefit to their mission or their operations, such as reduced energy or materials management costs or improved worker health and safety. It is much harder to promote green purchasing when the benefits accrue to the nation as a whole through the creation of jobs; markets for recovered materials, renewable energy, or biobased materials; and reduced air and water pollution. However, through education and outreach, more and more Federal purchasers understand the benefits of resource conservation to our nation and to future generations.

APPENDIX A

Statutory Requirements

RCRA SECTION 6002

42 USC Sec. 6962. - Federal procurement

(a) Application of section

Except as provided in subsection (b) of this section, a procuring agency shall comply with the requirements set forth in this section and any regulations issued under this section, with respect to any purchase or acquisition of a procurement item where the purchase price of the item exceeds \$10,000 or where the quantity of such items or of functionally equivalent items purchased or acquired in the course of the preceding fiscal year was \$10,000 or more.

(b) Procurement subject to other law

Any procurement, by any procuring agency, which is subject to regulations of the Administrator under section 6964 of this title (as promulgated before October 21, 1976, under comparable provisions of prior law) shall not be subject to the requirements of this section to the extent that such requirements are inconsistent with such regulations.

(c) Requirements

(1) After the date specified in applicable guidelines prepared pursuant to subsection (e) of this section, each procuring agency which procures any items designated in such guidelines shall procure such items composed of the highest percentage of recovered materials practicable (and in the case of paper, the highest percentage of the postconsumer recovered materials referred to in subsection (h)(1) of this section practicable), consistent with maintaining a satisfactory level of competition, considering such guidelines. The decision not to procure such items shall be based on a determination that such procurement items -

(A) are not reasonably available within a reasonable period of time;

(B) fail to meet the performance standards set forth in the applicable specifications or fail to meet the reasonable performance standards of the procuring agencies; or

(C) are only available at an unreasonable price. Any determination under subparagraph (B) shall be made on the basis of the guidelines of the National Institute of Standards and Technology in any case in which such material is covered by such guidelines.

(2) Agencies that generate heat, mechanical, or electrical energy from fossil fuel in systems that have the technical capability of using energy or fuels derived from solid waste as a primary or supplementary fuel shall use such capability to the maximum extent practicable.

(3) (A) After the date specified in any applicable guidelines prepared pursuant to subsection (e) of this section, contracting officers shall require that vendors:

(i) certify that the percentage of recovered materials to be used in the performance of the contract will be at least the amount required by applicable specifications or other contractual requirements and

(ii) estimate the percentage of the total material utilized for the performance of the contract which is recovered materials.

(B) Clause (ii) of subparagraph (A) applies only to a contract in an amount greater than \$100,000.

(d) Specifications

All Federal agencies that have the responsibility for drafting or reviewing specifications for procurement items procured by Federal agencies shall -

(1) as expeditiously as possible but in any event no later than eighteen months after November 8, 1984, eliminate from such specifications -

(A) any exclusion of recovered materials and

(B) any requirement that items be manufactured from virgin materials; and

(2) within one year after the date of publication of applicable guidelines under subsection (e) of this section, or as otherwise specified in such guidelines, assure that such specifications require the use of recovered materials to the maximum extent possible without jeopardizing the intended end use of the item.

(e) Guidelines

The Administrator, after consultation with the Administrator of General Services, the Secretary of Commerce (acting through the National Institute of Standards and Technology), and the Public Printer, shall prepare, and from time to time revise, guidelines for the use of procuring agencies in complying with the requirements of this section. Such guidelines shall -

(1) designate those items which are or can be produced with recovered materials and whose procurement by procuring agencies will carry out the objectives of this section, and in the case of paper, provide for maximizing the use of post consumer recovered materials referred to in subsection (h)(1) of this section; and

(2) set forth recommended practices with respect to the procurement of recovered materials and items containing such materials and with respect to certification by vendors of the percentage of recovered materials used, and shall provide information as to the availability, relative price, and performance of such materials and items and where appropriate shall recommend the level of recovered material to be contained in the procured product. The Administrator shall prepare final

guidelines for paper within one hundred and eighty days after November 8, 1984, and for three additional product categories (including tires) by October 1, 1985. In making the designation under paragraph (1), the Administrator shall consider, but is not limited in his considerations, to

-

(A) the availability of such items;

(B) the impact of the procurement of such items by procuring agencies on the volume of solid waste which must be treated, stored or disposed of;

(C) the economic and technological feasibility of producing and using such items; and

(D) other uses for such recovered materials.

(f) Procurement of services

A procuring agency shall, to the maximum extent practicable, manage or arrange for the procurement of solid waste management services in a manner which maximizes energy and resource recovery.

(g) Executive Office

The Office of Procurement Policy in the Executive Office of the President, in cooperation with the Administrator, shall implement the requirements of this section. It shall be the responsibility of the Office of Procurement Policy to coordinate this policy with other policies for Federal procurement, in such a way as to maximize the use of recovered resources, and to, every two years beginning in 1984, report to the Congress on actions taken by Federal agencies and the progress made in the implementation of this section, including agency compliance with subsection (d) of this section.

(h) "Recovered materials" defined

As used in this section, in the case of paper products, the term "recovered materials" includes -

(1) postconsumer materials such as -

(A) paper, paperboard, and fibrous wastes 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; and

(B) all paper, paperboard, and fibrous wastes that enter and are collected from municipal solid waste, and

(2) manufacturing, forest residues, and other wastes such as -

(A) dry paper and paperboard waste generated after completion of the papermaking process (that is, those manufacturing operations up to and including the cutting and trimming of the paper machine reel into smaller rolls or rough sheets) including: envelope cuttings, bindery trimmings, and other paper and paperboard waste, resulting from printing, cutting, forming, and other converting operations; bag, box, and carton manufacturing wastes; and butt rolls, mill wrappers, and rejected unused stock; and

(B) finished paper and paperboard from obsolete inventories of paper and paperboard manufacturers, merchants, wholesalers, dealers, printers, converters, or others;

(C) fibrous byproducts of harvesting, manufacturing, extractive, or wood-cutting processes, flax, straw, linters, bagasse, slash, and other forest residues;

(D) wastes generated by the conversion of goods made from fibrous material (that is, waste rope from cordage manufacture, textile mill waste, and cuttings); and

(E) fibers recovered from waste water which otherwise would enter the waste stream.

(i) Procurement program

(1) Within one year after the date of publication of applicable guidelines under subsection (e) of this section, each procuring agency shall develop an affirmative procurement program which will assure that items composed of recovered materials will be purchased to the maximum extent practicable and which is consistent with applicable provisions of Federal procurement law.

(2) Each affirmative procurement program required under this subsection shall, at a minimum, contain -

(A) a recovered materials preference program;

(B) an agency promotion program to promote the preference program adopted under subparagraph (A);

(C) a program for requiring estimates of the total percentage of recovered material utilized in the performance of a contract; certification of minimum recovered material content actually utilized, where appropriate; and reasonable verification procedures for estimates and certifications; and

(D) annual review and monitoring of the effectiveness of an agency's affirmative procurement program.

In the case of paper, the recovered materials preference program required under subparagraph (A) shall provide for the maximum use of the post consumer recovered materials referred to in subsection (h)(1) of this section.

(3) In developing the preference program, the following options shall be considered for adoption:

(A) Case-by-Case Policy Development: Subject to the limitations of subsection (c)(1)(A) through (C) of this section, a policy of awarding contracts to the vendor offering an item composed of the highest percentage of recovered materials practicable (and in the case of paper, the highest percentage of the post consumer recovered materials referred to in subsection (h)(1) of this section). Subject to such limitations, agencies may make an award to a vendor offering items with less than the maximum recovered materials content.

(B) Minimum Content Standards: Minimum recovered materials content specifications which are set in such a way as to assure that the recovered materials content (and in the case of paper, the content of post consumer materials referred to in subsection (h)(1) of this section) required is the maximum available without jeopardizing the intended end use of the item, or violating the limitations of subsection (c)(1)(A) through (C) of this section.

Procuring agencies shall adopt one of the options set forth in subparagraphs (A) and (B) or a substantially equivalent alternative, for inclusion in the affirmative procurement program.

FARM SECURITY AND RURAL INVESTMENT ACT, SEC. 9002

SEC. 9002. FEDERAL PROCUREMENT OF BIOBASED PRODUCTS.

(a) **APPLICATION OF SECTION.**—Except as provided in subsection (c), each Federal agency shall comply with the requirements set forth in this section and any regulations issued under this section, with respect to any purchase or acquisition of a procurement item where the purchase price of the item exceeds \$10,000 or where the quantity of such items or of functionally equivalent items purchased or acquired in the course of the preceding fiscal year was \$10,000 or more.

(b) **PROCUREMENT SUBJECT TO OTHER LAW.**—Any procurement, by any Federal agency, which is subject to regulations of the Administrator under section 6002 of the Solid Waste Disposal Act (42 U.S.C. 6962), shall not be subject to the requirements of this section to the extent that such requirements are inconsistent with such regulations.

(c) **PROCUREMENT PREFERENCE.**—(1) Except as provided in paragraph (2), after the date specified in applicable guidelines prepared pursuant to subsection (e) of this section, each Federal agency which procures any items designated in such guidelines shall, in making procurement decisions, give preference to such items composed of the highest percentage of biobased products practicable, consistent with maintaining a satisfactory level of competition, considering such guidelines.

(2) **AGENCY FLEXIBILITY.**—Notwithstanding paragraph (1), an agency may decide not to procure such items if the agency determines that the items—

(A) are not reasonably available within a reasonable period of time;

(B) fail to meet the performance standards set forth in the applicable specifications or fail to meet the reasonable performance standards of the procuring agencies; or

(C) are available only at an unreasonable price.

(3) After the date specified in any applicable guidelines prepared pursuant to subsection (e) of this section, contracting offices shall require that, with respect to biobased products, vendors certify that the biobased products to be used in the performance of the contract will comply with the applicable specifications or other contractual requirements.

(d) **SPECIFICATIONS.**—All Federal agencies that have the responsibility for drafting or reviewing specifications for procurement items procured by Federal agencies shall, within one year after the date of publication of applicable guidelines under subsection (e), or as otherwise specified in such guidelines, assure that such specifications require the use of biobased products consistent with the requirements of this section.

(e) GUIDELINES.—

(1) IN GENERAL.—The Secretary, after consultation with the Administrator, the Administrator of General Services, and the Secretary of Commerce (acting through the Director of the National Institute of Standards and Technology), shall prepare, and from time to time revise, guidelines for the use of procuring agencies in complying with the requirements of this section. Such guidelines shall—

(A) designate those items which are or can be produced with biobased products and whose procurement by procuring agencies will carry out the objectives of this section;

(B) set forth recommended practices with respect to the procurement of biobased products and items containing such materials and with respect to certification by vendors of the percentage of biobased products used; and

(C) provide information as to the availability, relative price, performance, and environmental and public health benefits, of such materials and items and where appropriate shall recommend the level of biobased material to be contained in the procured product.

(2) CONSIDERATIONS.—In making the designation under paragraph (1)(A), the Secretary shall, at a minimum, consider—

(A) the availability of such items; and

(B) the economic and technological feasibility of using such items, including life cycle costs.

(3) FINAL GUIDELINES.—The Secretary shall prepare final guidelines under this section within 180 days after the date of enactment of this Act.

(f) OFFICE OF FEDERAL PROCUREMENT POLICY.—The Office of Federal Procurement Policy, in cooperation with the Secretary, shall implement the requirements of this section. It shall be the responsibility of the Office of Federal Procurement Policy to coordinate this policy with other policies for Federal procurement to implement the requirements of this section, and, every two years beginning in 2003, to report to the Congress on actions taken by Federal agencies and the progress made in the implementation of this section, including agency compliance with subsection (d).

(g) PROCUREMENT PROGRAM.—(1) Within one year after the date of publication of applicable guidelines under subsection (e), each Federal agency shall develop a procurement program which will assure that items composed of biobased products will be purchased to the maximum extent practicable and which is consistent with applicable provisions of Federal procurement law.

(2) Each procurement program required under this subsection shall, at a minimum, contain—

(A) a biobased products preference program;

(B) an agency promotion program to promote the preference program adopted under subparagraph (A); and

(C) annual review and monitoring of the effectiveness of an agency's procurement program.

(3) In developing the preference program, the following options shall be considered for adoption:

(A) CASE-BY-CASE POLICY DEVELOPMENT.—Subject to the limitations of subsection (c)(2) (A) through (C), a policy of awarding contracts to the vendor offering an item composed of the highest percentage of biobased products practicable. Subject to such limitations, agencies may make an award to a vendor offering items with less than the maximum biobased products content.

(B) MINIMUM CONTENT STANDARDS.—Minimum biobased products content specifications which are set in such a way as to assure that the biobased products content required is consistent with the requirements of this section, without violating the limitations of subsection (c)(2) (A) through (C). Federal agencies shall adopt one of the options set forth in subparagraphs (A) and (B) or a substantially equivalent alternative, for inclusion in the procurement program.

(h) LABELING.—

(1) IN GENERAL.—The Secretary, in consultation with the Administrator, shall establish a voluntary program under which the Secretary authorizes producers of biobased products to use the label “U.S.D.A. Certified Biobased Product”.

(2) ELIGIBILITY CRITERIA.—Within one year after the date of enactment of this Act, the Secretary, in consultation with the Administrator, shall issue criteria for determining which products may qualify to receive the label under paragraph (1). The criteria shall encourage the purchase of products with the maximum biobased content, and should, to the maximum extent possible, be consistent with the guidelines issued under subsection (e).

(3) USE OF THE LABEL.—The Secretary shall ensure that the label referred to in paragraph (1) is used only on products that meet the criteria issued pursuant to paragraph (2).

(4) RECOGNITION.—The Secretary shall establish a voluntary program to recognize Federal agencies and private entities that use a substantial amount of biobased products.

(i) LIMITATION.—Nothing in this section shall apply to the procurement of motor vehicle fuels or electricity.

(j) FUNDING.—

(1) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated such sums as may be necessary to carry out this section.

(2) FUNDING FOR TESTING OF BIOBASED PRODUCTS.—

(A) IN GENERAL.—Of the funds of the Commodity Credit Corporation, the Secretary shall use \$1,000,000 for each of fiscal years 2002 through 2007 to support testing of biobased products to carry out this section.

(B) USE OF FUNDS.—Amounts made available under subparagraph (A) may be used to support contracts or cooperative agreements with entities that have experience and special skills to conduct such testing.

(C) PRIORITY.—At the discretion of the Secretary, the Secretary may give priority to the testing of products for which private sector firms provide cost sharing for the testing.

APPENDIX B

RCRA Data Questionnaire

Date Due: March 19, 2004

Date Prepared: _____

**RESOURCE CONSERVATION AND RECOVERY ACT (RCRA)
EXECUTIVE ORDER 13101**

Agency Report for Fiscal Year 2003

Agency or Department _____

Agency Contact _____

Contact Telephone Number _____

Contact E-Mail Address _____

• **Federal Procurement Data System (FPDS) Data**

- How many DD 350s or SF 279s did your Agency complete in FY 2003?

- In FY 2003, how many DD 350s or SF 279s had a code in line B12F (for the DD 350) or block 19A (for the SF 279), which indicate whether EPA-designated items will be acquired? _____

- Provide the number of DD 350s or SF 279s with each code, A-E, in line B12F (for the DD 350) or block 19A (for the SF 279). These codes indicate whether the EPA-designated products must contain the required minimum recycled content, the justification for not requiring recycled content products, or that no EPA-designated products will be acquired under the contract:
Code A (all EPA-designated products must contain the required minimum recycled content) _____
 - Code B (availability) _____
 - Code C (price) _____
 - Code D (performance) _____
 - Code E (no EPA-designated products acquired) _____

○ How many of the DD 350s or SF 279s coded A, B, C, or D in block B12F (for the DD 350) or block 19A (for the SF 279) also had a code (A or B) in line B12G (for the DD 350) or block 19B (for the SF 279)? _____

○ Provide the number of DD 350s or SF 279s with line B12G (for the DD 350) or block 19B (for the SF 279) coded A or B. _____

○ How has the Agency reviewed the FY 2003 FPDS data for compliance assessment and/or trend analyses?

○ Please describe findings, changes, and/or actions that were a direct result of the assessments or analyses above.

● **Indicator Items for EPA-Designated Recycled Content Products**

The General Services Administration and the Defense Logistics Agency will provide data for agency purchases directly from them. Please provide amounts for your agency’s purchases from other sources, including GSA schedule contractors and your service contractors, including construction contractors, fleet maintenance contractors, and facilities maintenance contractors.

○ **Paper: Commercial Sanitary Tissue Products**

- Does your Agency purchase this item (directly or through contracts)? **Yes** ___ **No** ___ If no, skip to next section.
- total dollar amount¹ of these products purchased² by your Agency from sources *other than GSA* in FY 2003 \$ _____.
- Dollar amount of these products containing recovered materials³ purchased by your Agency from sources *other than GSA* in FY 2003 \$ _____.

¹ “Total amount” equals the amount of product without recovered materials plus the amount of product with recovered materials.

² Within this document, the term purchased includes both direct government purchases, as well as procurement of products through government contracts.

- If this product is purchased using an Agency specification, does that specification require the use of recovered materials?
Yes ___ **No** ___ **Not Applicable** ___
- Were there any technical impediments to increasing the purchase of this item by your Agency in FY 2003? **Yes** ___ **No** ___. If yes, please describe the impediment(s).

○ **Non-Paper Office Products: Toner Cartridges**

- Does your Agency purchase this item (directly or through contracts)? **Yes** ___ **No** ___ If no, skip to next section.
- Total dollar amount of these products purchased by your Agency from sources *other than GSA or DLA* in FY 2003 \$_____.
- Dollar amount of these products containing recovered materials purchased by your Agency from sources *other than GSA or DLA* in FY 2003 \$_____.
- If this product is purchased using an Agency specification, does that specification require the use of recovered materials?
Yes ___ **No** ___ **Not Applicable** ___
- Were there any technical impediments to increasing the purchase of this item by your Agency in FY 2003? **Yes** ___ **No** ___. If yes, please describe the impediment(s).

○ **Construction Products: Concrete**

- Does your Agency purchase concrete (directly or through contracts, e.g., construction contracts)? **Yes** _____ **No** _____
If no, skip to next section.
- Total amount of concrete purchased and/or used by your Agency in FY 2003 \$_____ and/or _____ cubic yards, and/or total number of contracts awarded that required the use of concrete _____.

³ The products designated by EPA are commonly referred to as “CPG-items” or “recycled content products.” RCRA refers to them as “products containing recovered materials,” which is the term used in this reporting document unless a more specific term, such as re-refined oil or retread tires, is used.

- Amount of concrete containing coal fly ash and/or ground granulated blast furnace slag purchased and/or used by your Agency in FY 2003 \$_____ and/or _____ cubic yards, and/or total number of contracts awarded that required the use of concrete containing coal fly ash or ground granulated blast furnace slag _____.
- If this product is purchased using an Agency specification, does that specification require the use of recovered materials?
Yes ___ **No** ___ **Not Applicable** ___
- Were there technical impediments to increasing the amount of concrete containing coal fly ash and/or ground granulated blast furnace slag purchased by your Agency in FY 2003?
Yes ___ **No** ___ If yes, please describe the impediment(s).

○ **Landscaping Products: Landscaping Timbers**

- Does your Agency purchase this item (directly or through contracts or other mechanisms)? **Yes** ___ **No** ___ If no, skip to next section.
- Total dollar amount of these products purchased by your Agency in FY 2003 \$_____.
- Dollar amount of these products containing recovered materials purchased by your Agency in FY 2003 \$_____.
- If this product is purchased using an Agency specification, does that specification require the use of recovered materials?
Yes ___ **No** ___ **Not Applicable** ___
- Were there any technical impediments to increasing the purchase of this item by your Agency in FY 2003? **Yes** ___ **No** ___ If yes, please describe the impediment(s).

○ **Park and Recreation Products: Park Benches and Picnic Tables**

- Does your Agency purchase this item (directly or through contracts or other mechanisms)? **Yes** ___ **No** ___ If no, skip to next section.
- Total dollar amount of these products purchased by your Agency in FY 2003 \$_____.

- Dollar amount of these products containing recovered materials purchased by your Agency in FY 2003 \$_____.
- If this product is purchased using an Agency specification, does that specification require the use of recovered materials?
Yes ___ **No** ___ **Not Applicable** ___
- Were there any technical impediments to increasing the purchase of this item by your Agency in FY 2003? **Yes** ___ **No** ___. If yes, please describe the impediment(s).

○ **Transportation Products: Traffic Barricades**

- Does your Agency purchase this item (directly or through contracts or other mechanisms)? **Yes** ___ **No** ___ If no, skip to next section.
- Total dollar amount of these products purchased by your Agency in FY 2003 \$_____.
- Dollar amount of these products containing recovered materials purchased by your Agency in FY 2003 \$_____.
- If this product is purchased using an Agency specification, does that specification require the use of recovered materials?
Yes ___ **No** ___ **Not Applicable** ___
- Were there any technical impediments to increasing the purchase of this item by your Agency in FY 2003? **Yes** ___ **No** ___. If yes, please describe the impediment(s).

○ **Vehicular Products: Re-refined Oil**

- Does your Agency purchase this item (directly or through contracts or other mechanisms)? **Yes** ___ **No** ___ If no, skip to next section.
- Total dollar amount of these products purchased by your Agency in FY 2003 \$_____.
- Dollar amount of these products containing recovered materials purchased by your Agency in FY 2003 \$_____.

- If this product is purchased using an Agency specification, does that specification require the use of recovered materials?
Yes ___ **No** ___ **Not Applicable** ___
- Were there any technical impediments to increasing the purchase of this item by your Agency in FY 2003? **Yes** ___ **No** ___. If yes, please describe the impediment(s).

○ **Miscellaneous Products: Signage**

- Does your Agency purchase this item (directly or through contracts or other mechanisms)? **Yes** ___ **No** ___ If no, skip to next section.
- Total dollar amount of these products purchased by your Agency in FY 2003 \$_____.
- Dollar amount of these products containing recovered materials purchased by your Agency in FY 2003 \$_____.
- If this product is purchased using an Agency specification, does that specification require the use of recovered materials?
Yes ___ **No** ___ **Not Applicable** ___
- Were there any technical impediments to increasing the purchase of this item by your Agency in FY 2003? **Yes** ___ **No** ___. If yes, please describe the impediment(s).

○ **Solid Waste Prevention, Recycling, and Waste Minimization**

- Did you institute new, substantially improved, or updated solid waste prevention practices in FY 2003?
Yes ___ **No** ___. Please provide an explanation of your response.
-
-
-
- Does your Agency have sites or facilities with composting programs?
Yes ___ **No** ___. If yes, how many facilities or sites? _____
Estimate the total weight of materials diverted to composting: _____ tons.
 - What percentage of offices/sites operated by your Agency have an active office products recycling program? _____ of _____ sites, which is _____ percent of offices/sites.
 - What percentage of residential housing operated by your Agency have an active household products recycling program?

_____ of _____ sites, which is _____ percent of housing. ___ Not Applicable

- What percentage of demolition projects managed by and/or contracted by your Agency include the recovery of construction materials?
_____ of _____ projects, which is _____ percent of demolition projects. ___ Not Applicable
- What percentage of the total solid waste⁴ generated by your Agency was diverted to recycling? _____ of _____ metric tons, which is _____ percent.
- Does your Agency have an internal awards program in accordance with Executive Order 13101, Section 802? **Yes** ___ **No** ___. Please provide details for your response., of if the response is no, please explain why not.

- In FY 2003, did your Agency participate in a pilot project to purchase environmentally preferable products or services per the requirements of E.O. 13101, sections 503(b) and 601(c)? **Yes** ___ **No** ___. Please provide details for your response.

- **Management Controls**

- **Affirmative Procurement Policy**

- Does your Agency have a documented policy or procedure for the implementation of the affirmative procurement program (APP) required by section 6002 of RCRA? **Yes** _____ **No** _____
- Does the Agency policy define responsibility for:
 - Conducting awareness training? **Yes** _____ **No** _____
 - Incorporating APP requirements into specifications and contracts? **Yes** _____ **No** _____
 - Establishing and measuring progress toward APP objectives? **Yes** _____ **No** _____
- Reporting progress? **Yes** _____ **No** _____
- Management review? **Yes** _____ **No** _____

⁴ "Solid waste" refers to municipal solid waste as defined by EPA. Please indicate if your Agency is including other materials, such as construction and demolition debris.

- If the answer to any question is no, please explain why not.

- Does your Agency have a requirement to routinely update the affirmative procurement policy? **Yes** _____ **No** _____ If so, is the APP policy reviewed/updated in accordance with this plan? **Yes** _____ **No** _____ Has the Agency affirmative procurement policy been updated within the past three years? **Yes** _____ **No** _____
- Please attach a copy of or provide the URL for the website for your Agency APP policy, if it has changed since the FY 2002 report.

○ **Training**

- Who is responsible for conducting training of agency personnel with respect to the buy-recycled requirements?

- How many acquisition personnel have documented APP training within the past three years? _____ of _____ personnel, which is _____ percent.
- Is training provided by agency personnel, an outside source (e.g., Defense Acquisition University's contracting officer training courses), or both?

- What percentage of purchase card holders have documented APP training within the past three years, as required by Executive Order 13101? _____ of _____ personnel, which is _____ percent.
- Who provides the training to purchase card holders? _____
- How is training of purchase card users documented?

○ **Auditing**

- What percentage of Agency facilities conducted and documented contracting and/or environmental audits⁵ for APP compliance during this reporting period? _____ percent
- Does the Agency conduct trend analysis of audit, training, and FPDS data to assess APP program effectiveness? **Yes** _____ **No** _____

⁵ Includes internal, corporate, external, or other audits

- What types of trends are realized as a result of findings from these audits?

- Are audit findings reported to senior facility management? **Yes** _____
No _____
- Are corrective actions from these audit findings tracked by senior facility management? **Yes** _____ **No** _____
- Provide a copy of or the URL for the website for your Agency APP audit protocol, procedure, or other similar program document.

○ **Agency Goals**

- As required by E.O. 13101, what is your agency's goal for solid waste diversion by 2005? _____ By 2010? _____
- What is your agency's current recycling or diversion rate?

- What is your agency's goal to increase the procurement of EPA-designated recycled content products?

- As required by E.O. 13101, does your agency have a goal for increasing the use of environmentally preferable products? **Y**_____ **N**_____ If yes, what is the goal? _____ How are you measuring progress toward the goal?
