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# Closing the Circle News



## **America Recycles Day 2001**

by the President of the United States of America

#### A PROCLAMATION

We must preserve our natural heritage by serving as good stewards of our land. Recycling helps to serve this important function by conserving our natural resources as we reuse them where we can. Recycling safeguards our environment and helps keep America beautiful for present and future generations.

The United States generates more than 230 million tons of municipal solid waste every year, which amounts to four and a half pounds of trash per person per day. However, thanks to the efforts of the American people, we are now recovering more than 64 million tons of usable material annually, and that rate has doubled since 1990.

Successful recycling includes not only the collection of materials, but also the manufacture of new products and the purchase of recycled content products. Buying products made of recycled materials contributes to domestic energy conservation and ultimately, a cleaner environment. For example, recycling one aluminum can saves enough energy to run a television set for three hours. Recycling a ton of glass saves the equivalent of 9 gallons of fuel oil, and recycling solid waste prevents the release of 37 million tons of carbon into the air – roughly the amount emitted annually by 28 million cars.

As more products made with recycled materials reach the marketplace, individual consumers, corporations, and Federal agencies are purchasing these goods as cost-effective and responsible business solutions. Such items may range from recycled content paper, retread tires, and re-refined oil, to concrete and insulation containing recycled materials.

Our Nation is making great progress by recycling, but we can and must do better. America Recycles Day 2001 represents a partnership among Government, industry, and environmental organizations to promote recycling and to encourage the participation of all our citizens. As part of the event, the Federal Government hosted a poster contest for the children of Federal employees to help raise awareness in the Government, and across the Nation, of the need to continue protecting the environment by recycling. All Americans can help "Close the Recycling Circle," by recycling products in our homes, schools, offices, and communities, and also by purchasing products made from recycled materials. These recycling and remanufacturing activities help conserve resources and also stimulate our economy by creating jobs and revenue.

Last year, more than 3 million people in all 50 States and 2 U.S. territories committed to reduce, reuse, and recycle more and to buy recycled products. For America Recycles Day 2001, I encourage all Americans to build on these achievements

by recycling and by purchasing and using products made from recycled materials. These responsible actions can help protect our environment and conserve natural resources for the benefit of all.

NOW, THEREFORE, I, GEORGE W. BUSH, President of the United States of America, by virtue of the authority vested in me by the Constitution and laws of the United States, do hereby proclaim November 15, 2001, as America Recycles Day. I call upon the people of the United States to observe this day with appropriate programs and activities.

IN WITNESS WHEREOF, I have hereunto set my hand this fifteenth

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day of November, in the year of our Lord two thousand one, and of the Independence of the United States of America the two hundred and twenty-sixth.

n America Recycles Day 2001, President Bush encouraged all Americans to continue to recycle and to purchase and use recycled content Consistent with products. President's message, Federal agencies will continue to be national leaders in recycling and buying recycled content products. This issue of Closing the Circle News spotlights several Federal, local, and private sector projects that can be easily duplicated by other agencies, private sector purchasers, manufacturers.

# Federal Government Continues to Lead the Way in Postconsumer Copier Paper Purchasing

Since FY 1999, the Federal government has been increasing its purchases of office papers containing 30 percent postconsumer fiber. In just the Washington, DC area alone, in FY 2001, Federal agencies purchased 1.5 billion sheets of 30 percent postconsumer copier paper through the Government Printing Office. Almost every cabinet-level department and agency purchased 30 percent postconsumer copier paper, for a compliance rate of 84 percent. The Executive Office of the President is leading the effort with 100 percent compliance!

Executive Order 13101, "Greening the Government Through Waste Prevention, Recycling, and Federal Acquisition," directs all Federal agencies to expand and strengthen the Federal government's dedication to recycling and to buying recycled content products. E.O. 13101 specifically directs Federal agencies to purchase copier paper and other office papers containing 30 percent postconsumer fiber beginning December 31, 1998.

In addition to purchasing 8.5 x 11 recycled content copier paper, many Federal agencies are also purchasing 8.5 x 14, 11 x 17, 3-hole punched, and colored copier papers

with 30 percent postconsumer content. A review of current pricing shows that it is less expensive to purchase 30 percent postconsumer content 11 x 17 copier paper than to purchase non-compliant 11 x 17, and it is only marginally more expensive to buy 30 percent postconsumer content, 3-hole punched copier paper. The White House Task Force on Recycling will continue to work with Federal agencies to encourage them to purchase all sizes and types of copier paper containing 30 percent postconsumer fiber.

According to the American Forest & Paper Association, the domestic paper industry continues to increase its use of recovered paper and paperboard to manufacture new paper and paperboard products. Slightly more than 13 millions tons of printing and writing papers were recovered in 2000. However, only 14.9 percent of this recovered paper was used to manufacture new printing and writing papers. Continued demand for 30 percent postconsumer paper products by public and private purchasers will help to assure that there will be markets for the paper we recover in our office and home recycling programs. Just follow the Federal lead!

## America Recycles Day Federal Poster Celebration

In celebration of the fifth America Recycles Day (ARD), the White House Task Force on Recycling and the Council on Environmental Quality honored 14 children of Federal employees for creating outstanding posters reflecting the 2001 ARD theme, "A Great Time to Renew Our Commitment to Recycling." The children's posters have been turned into a 2002 ARD calendar. The White House Task Force on Recycling created the poster calendar contest to raise awareness of ARD within the Federal government arena. The contest was open to children of Federal employees and government contractors from Kindergarten to 12th grade. This year's contest winners came from across the United States and U.S. installations overseas.

The contest winners and their families were treated to a private, behind the scenes tour of the Smithsonian Institution's American History and Natural History Museums. The Smithsonian tour included hands-on activities with galimotos (toys made by African children from recycled materials) and other conservationist exercises at the Smithsonian Lemelson Center for Invention, including testing for water pollutants, extracting DNA, and conserving the Star-Spangled Banner. During the awards ceremony, the contest winners received special plaques containing exact replicas of their artwork as it appears in the America Recycles Day 2002 Federal poster calendar.

Every poster submitted was an excellent example of young America's awareness of the importance recycling and conservation of our nation's precious natural resources. For a free copy of the calendar, please send an email to Task\_Force@ofee.gov. Orders will be filled on a first come, first served basis.

#### And the winners are...

#### Elynora Sapp,

Dept. of Justice, Bureau of Prisons

#### Ana Rose Gever,

Dept. of the Interior, Bureau of Indian Affairs

#### Paige Milam,

Dept. of Defense, U.S. Air Force

#### Tyson Jess.

Dept. of the Interior, U.S. Fish and Wildlife Service

#### George Keidel,

Dept. of Justice, Federal Prison Industries

#### Taylor Milam,

Dept. of Defense, U.S. Air Force

#### Jataia Thomas,

Dept. of Defense, U.S. Army

#### Whitney Milam,

Dept. of Defense, U.S. Air Force

#### **Priyam Patel**,

U.S. Postal Service

#### Veronica Thompson,

Dept. of Justice, Bureau of Prisons

#### Ashley Asher,

Dept. of Justice, Bureau of Prisons

#### Allison Church,

Dept. of Justice, Bureau of Prisons

#### Daniela McCain,

Dept. of Defense, U.S. Air Force

#### Margarita Castellanos,

Dept. of Justice,

Immigration and Naturalization Service

# Team Finds Innovative Approach to Closing the Paper Recycling Loop

The U.S. Environmental Protection Agency Region 5 office and the General Services Administration teamed to create a successful paper recycling loop in the Metcalfe Federal Building in Chicago. The building houses 11 agencies, most of whom are participating in the closed loop project.

Metcalfe Building employees separate mixed paper from their trash. The paper is delivered to a Kimberly Clark paper recycling plant for use in manufacturing new tissue and towel products. In December, 2001, GSA's janitorial contractor, Tried & True Janitorial Maintenance Contractor, began buying back paper products made from the recycled paper to use in the Metcalfe building.



The new approach also has reduced janitorial and recycling costs. By going to a mixed paper sort, the janitorial contractor spends less time removing paper and bringing it to the building's compactor. The janitorial contractor is paying less for paper products for the building's restrooms. The building is receiving more money for its collected recyclables and no longer paying hauling fees.

Under the Metcalfe Building's previous recycling contract, the Metcalfe building tenants were compensated for collected recyclables but the hauling fees were very high. The recycler was not working with any paper mills that would take the building's recyclables and turn them into products that EPA

could use. In 2001, the recyclables hauler was changed to a company that delivers directly to Kimberly Clark. The building currently generates more than 18 tons of paper per month.

This achievement is the first by a mid-Western GSA Federal Building to close the recycling loop. The project benefits not only the environment by conserving resources but rewards the maintenance contractor with recycled products at a less expensive cost. With the success at the Metcalfe Federal Building, GSA is looking to extend this program to all Federal buildings in the Chicago area.

# EPA Moves to Expand Federal Buy-Recycled Program

Soon government agencies might find themselves purchasing recycled content office furniture, roofing materials, and nylon carpet, among other items. EPA has proposed to add 11 new items to the Federal government's buy-recycled program, officially known as the Comprehensive Procurement Guidelines (CPG). Currently there are 54 recycled-content items on the CPG list. In a Notice of Proposed Rulemaking, published in the Federal Register (FR) on August 28, 2001, EPA proposed to add the following items to the CPG:

Procurement of the proposed items will divert tons of material from landfills and bolster markets for recovered materials such as rubber, old carpets, steel, aluminum, plastic, agricultural fiber, wood waste, glass, and coal combustion byproducts. A final notice is expected to be issued by this summer. More information on the CPG's Notice of Proposed Rulemaking (66 FR 45256) and the Draft RMAN (66 FR 45927) can be obtained on the internet at www.epa.gov/cpg.





# **Brewing Up Better Lawns**

The Presidio Trust in San Francisco, CA creates its own compost tea for use on the Presidio's ball fields and the Presidio Golf Course. The tea, which is part of the Presidio's Integrated Pest Management Program, provides nutrients and millions of microorganisms to the soil. Data from a year long trial period have demonstrated that the greens treated with compost tea had longer root length, less disease, and higher density than the control greens. The Golf Course was awarded the Environmental Leader In Golf Award by the Golf Course Superintendents Association of America.

In 2000, Presidio Golf Course used 95 percent less fungicide than the average private courses in San Francisco, no insecticides, and approximately 30 percent less herbicide.

The Presidio Trust's Regeneration Program brews 150 gallons of compost tea weekly from compost produced on site. Compost tea is an aqueous solution made by suspending high quality compost in a large container of water, similar to brewing tea. The compost is held in a container that allows the water to pass through but holds in compost's larger particles. It is like a large tea bag. The solution then brews for 24 hours in order to let the organisms multiply.

The concept of compost tea is based on the understanding that our soils are ecosystems that have complex food webs and nutrient cycling. Many of our soils have been depleted of the bacteria and fungi that would naturally reside in them. As a result, disease outbreaks can occur because the soil ecosystems are unbalanced. Quality compost contains a naturally balanced ecosystem that is similar to many soil types. When producing compost tea the organisms that were present in the compost populate the "tea". This aqueous solution can then be applied to areas where it is not feasable to till in compost (i.e., lawns).

# Recycled Paper Initiative Encourages Legal Community to Buy Recycled

The Recycled Paper Initiative, sponsored by the District of Columbia Bar Environment, Energy and Natural Resources Section, aims to "close the loop" by increasing recycled paper use within the legal community, in accord with federal and local legislative policies. Despite vigorous promotion of recycling, over 90 percent of office paper purchased in the United States is still made largely from virgin materials. The legal community generates millions of reams of waste paper each year, at a rate of nearly one ton per lawyer. In 2001, the Recycled Paper Initiative helped the D.C. Bar transition to using 30 percent postconsumer

recycled paper. The Bar was able to make the switch with no additional cost to members. The Environment Section is also asking local judges to adopt a court rule requiring the use of recycled paper for court filings, with the ultimate goal of encouraging lawyers to purchase recycled paper for all office uses.

For inquires or comments on the Recycled Paper Initiative, please contact Max Williamson, D.C. Bar Environment, Energy and Natural Resources Steering Committee, Beveridge & Diamond, P.C., dwilliamson@bdlaw.com or (202) 789-6084.



# Portland, Oregon's Tri-Met Bus Fleet Switches to Re-refined Oil

fter a year long test, Tri-Met recently decided to switch its fleet of 670 buses to re-refined lubricating oil. Tri-Met offers public transportation service for the Portland, OR metropolitan area, providing 62 million bus trips in fiscal year 01. Tri-Met purchases 55,000 gallons of lubricating oil annually.



Under its Green Policy,

Tri-Met is seeking to reduce its negative impacts on the environment by reducing waste, reusing and recycling materials, and purchasing recycled content products. Tri-Met began looking at the feasibility of using re-refined oil in May of 2000, when it met with representatives from re-refined oil supplier Union 76, Mt. Hood Oil Co., and engine manufacturer Cummins Northwest to discuss the use of re-refined motor oil in Tri-Met's bus fleet.

In July, 2000, Tri-Met began using re-refined engine lubricating oil (76 Firebird HD 15w-40) in the 200 buses housed at one of its three major bus maintenance garages. To effect the change, all of the virgin motor oil then in use was pumped from the facility's storage tanks and sent to one of the other garages for use. The tanks then were filled with the Firebird re-refined oil. Firebird and other oils are compatible and can be mixed, which allowed Tri-Met to gradually change over to Firebird during routine oil changes. Because Tri-Met had already gone to extended oil drain intervals of 12,000 miles, it took three months to convert all 200 buses to the Firebird re-refined oil.

As the months passed, no problems were encountered, no critical or abnormal oil analyses were reported, and the fleet rolled on.

In October of 2001, Tri-Met undertook a side-by-side comparison of two buses – one having used re-refined oil for 12 months, and the other having used virgin oil for 12 months. Both bus engines had been completely overhauled in June of 2000, had comparable mileage (48,000) on the overhauled engines, and had comparable duty cycles.

The engine heads and two pistons were removed. Oil pans were examined for sludge and soot buildup. Piston rings and valves were examined for carbon build-up, which was similar between the two engines. Tri-Met also examined the rods and main bearings of the two removed pistons for wear. There was no significant difference in appearances between the two engine components except that the engine using re-refined oil had more wear on the rod bearings. This was also indicated in the oil analysis report. This was not deemed a significant issue because, in Tri-Met's experience,

bearing wear varies from engine to engine even when virgin oil is used.

Based on three factors – the results of the visual examination, oil analysis for the year, and information obtained from the Seattle Metro transit agency on its two-year experience with re-refined oil– Tri-Met decided to switch its entire fleet of buses to re-refined oil!!

# The Utility of Recycled Content Paper

Oxnard, CA has been purchasing a variety of products containing postconsumer material. Recently, the Utilities Division converted customer utility bills and envelopes to 30 percent postconsumer paper. About 8.1 tons of paper will be used annually to create the utility bills and envelopes. Oxnard will educate its customers by printing, "Made with Post Consumer Recycled Paper," on each piece of paper.

The switch to recycled content paper required the Utilities Division to overcome several obstacles. Oxnard outsources its monthly utility bills, and the vendor indicated that recycled paper would cost an additional \$4,000 per year. In addition, the vendor indicated that 30 percent postconsumer paper would no longer be available in the future and that the Federal government was reducing its content standard to 20 percent postconsumer content. After assurance from the White House Task Force on Recycling that the Federal content standard is not changing and negotiating with the vendor on price, Oxnard was able to make the switch. The recycled content paper will cost an additional \$2,100 per year, but price negotiations continue.

# Ford's Voluntary Replacement Tires "Hit the Road"

By Paul Ruesch, Environmental Engineer, U.S. EPA Region 5



ast year, The Ford Motor Company faced the daunting task of voluntarily replacing more than 13 million passenger tires that it felt could pose a safety risk to vehicle owners. Ford made it a priority to ensure that the removed tires were not reused on other vehicles where they could still pose a safety risk.

Ford has long been a leader in innovative recycling and utilization of recycled products in new vehicles. Ford's Recycling Action Team determined that the answer to how to recycle the tires was the road itself. Ford is supporting the use of crumb tire rubber in value-added uses, such as playground surfaces, handicapped ramps on playgrounds, and rubberized asphalt roadways. "Rubberized asphalt presents an opportunity for these tires to get back on the road, making it safer, better performing, and longer lasting," said Andy Acho, Ford's Worldwide Director of Environmental Outreach & Strategy.

Ford researched the use of rubberized asphalt in Arizona, California, Texas and Florida, where the use of rubberized asphalt is common, as well as R&D projects on the process and performance of the pavements and health and safety studies answering whether the technology was safe for both workers and the environment. "Several states have proven the use of rubberized asphalt in all different climates and road conditions -- most questions regarding this technology have answers," said Donna Carlson of the Rubber Pavements Association. The use of rubberized asphalt is accepted by both the Federal Highway Administration (FHWA) and American Association of State Highway Transportation Officials, which

develops standards for pavement design, performance and maintenance. In 1993, environmental and occupational tests performed by seven Midwestern states and the U.S. EPA on several different rubberized asphalt mixes in Michigan showed that emissions from rubberized asphalt mixing and application were very similar to conventional asphalt.

Armed with this information, Ford contracted with RecoveryTechnologies Group, Inc. (RTG) of Guttenburg, NJ to collect and process the replaced tires into crumb rubber compatible with rubberized asphalt paving technology and playground surfacing. Next, Ford teamed with the FHWA and EPA Region 5 to seek candidate projects to use the crumb rubber. Ford communicated that it was willing to subsidize the cost of the crumb rubber for selected roadway paving or playground surfacing projects.

To date, Ford has either provided or entered into contracts to provide repayment for crumb rubber for more than a dozen projects. These include playgrounds, athletic fields, and horse arenas. The crumb rubber is used in playground surfaces, soil amendments, and running tracks. The new East River Park in New York will add 275,000 pounds of crumb rubber to play areas. Ford also provided 1.3 million pounds of crumb tire rubber for 50 lane miles of rubberized asphalt roadways in Phoenix, where Arizona State University is researching material properties of asphalt rubber mixtures. "Ford is trying to be a catalyst to expand the market for environmentally responsible applications for crumb rubber derived from scrap tires," said Acho. "All of us need to be keepers of the environment, not just users of it."

# Stepping into the Winner's Circle

ort Eustis and Fort Story, VA support more than 18,000 military and civilian personnel. They are home to several training schools and other tenants and commands. The Environmental and Natural Resources Division (ENRD) is using a combination of policy, training, and program promotion to increase purchases of recycled content products.

The affirmative procurement policy states the facilities' preference for recycled content products, requires the validation of recycled content, and establishes an annual

survey for monitoring the program's Contracting, progress. logistics, environmental management, and legal affairs worked cooperatively to develop the affirmative procurement policy and were critical to its successful implementation. The 43 Commands different and directorates at Fort Eustis and Fort Story purchase range of recycled content environmentally preferable products, including paper and paper products, nonpaper office products, paint and construction

**ENRD** focused its training efforts on specific groups. There are more than 650 purchase card holders at Forts Eustis and Story, who must attend initial training and annual refreshers.

products, and vehicular

products.

Personnel attending the mandatory training receive a colorful flyer full of information on purchasing recycled content products. Affirmative procurement is also taught in the mandatory training for hazardous waste coordinators and recycling coordinators.

The Hazmart, a centralized hazardous material management facility serves more than 100 personnel authorized to purchase hazardous materials. Users of lubricating oil receive re-refined oil unless the performance specifications do not meet requirements. The Hazmart also monitors the purchase of antifreeze to ensure that personnel are using antifreeze recycled on-site. In 2001, 7 percent of purchases from the Hazmart, including paint and cleaning products, were recycled content or environmentally preferable products.

ENRD performs a detailed survey of the installation activities to determine the level of awareness of the affirmative procurement requirements, the level of participation, and obtain feedback

> procurement personnel. ENRD's 2000 baseline survey showed the need for education and outreach. The 2001 survey showed that awareness of the affirmative procurement requirements had increased to 84 percent of respondents.

ENRD initiated a "green" construction pilot project to evaluate and document the use of recycled content products in renovation/ construction projects. ENRD will information use concerning cost. performance, availability of recycled content products to ensure "green" construction becomes the standard on the installation. ENRD also prepared a brochure for contractors. "Environmental Policies for Contractors at the U.S. Army Transportation Center," which articulates the installation policy on affirmative procurement and is distributed manually and electronically to all service and construction contractors who perform work

at Fort Eustis.

Note: The U.S.Army Transportation Center Fort Eustis was awarded a 2001 Closing the Circle Award in the "Affirmative Procurement" category.

# Federal Electronics Stewardship Forum Allows Chief Information Officers, Acquisition Executives, Environmental Professionals, and Property Managers to Make Recommendations

n October 18 and 19,2001, the White House Council on Environmental Quality and the Department of Defense (DoD) sponsored the "Federal Government Electronic Stewardship Forum." The forum was a follow-on to recommendations made at the National Electronics Stewardship Workshop, Shepherdstown, WV in February, 2001. The Forum allowed senior-level officials from the Federal information technology, acquisition/finance, and property management communities to identify issues and make recommendations that could be used to develop a Federal government-wide strategy to influence the acquisition, management, proper disposition, and life cycle costs of electronic assets.

Three separate breakout sessions allowed participants to discuss solutions to environmental, information technology, and acquisition/finance barriers that impact the procurement and use of environmentally preferable, energy-efficient, and cost-efficient electronic equipment. Presentations on the subject were made by senior-level executives from DoD, the U.S. Environmental Protection Agency, the Department of the Interior, and the Office of Federal Procurement Policy.

The Forum was highlighted by the keynote remarks of James Connaughton, Chair, CEQ, who underscored the centrality of stewardship and stressed the Administration's intent to build on the successes of the last years, to set the

example for the world in terms of stewardship practices and forward thinking about how the Federal government can utilize all the assets at its disposal in the service of the public. "We have the opportunity to continue building on the successes of the last [several] years, to continue to set the example for the world in terms of the kinds of stewardship practices and forward thinking about how we utilize all the assets that the federal government brings to its disposal in the service of the public," Mr. Connaughton said. "The federal government is America's, if not the world's, largest consumer of electronics. The federal government is the world's largest industrial organization."

Forum attendees were asked to comment on a draft "Action Plan for Improving Environmental Management of Electronic Assets." As a result of the Forum and the recommendations received, the Electronic Stewardship Workgroup, signatory to a Memorandum of Understanding for "Improving Environmental Management of Electronic Assets," is prioritizing a list of short- and long-range actions. They also will be developing a Federal government-wide strategy to implement environmentally preferable and energy efficient management practices and reduce the economic and life cycle costs of electronic assets.

The Forum was attended by more than 200 representatives from the Federal government, industry, and non-governmental organizations.

## White House Task Force on Recycling

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Containing a minimum of 30 percent postconsumer fiber.

The White House Task Force on Recycling wishes to thank the U.S. General Services Administration for their help and support in producing this newsletter.

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