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Closing the Circle News

Soaring into Savings

Imagine saving more than \$500 million at a time when defense projects seem only to go up not down. Yes it is possible in this high tech era of digital information! Lockheed Martin is switching to electronic technical manuals for the F-16 fighter jet. According to the company, the Air Force alone could save \$500 million on printing, distribution, and library updates.

There are about 3,000 F16 Fighting Falcons in use by 24 countries. Today, each country has a

In addition to meeting the Air Force's cost-cutting objectives, switching to electronic manuals will provide:

- Faster manual updating.
- Huge cost savings over the current paper-based process in delivering electronic publications and updating electronic databases for multiple customers from a single source.
- Information versatility and reuse across two-dozen F-16 customers.

unique set of manuals comprising about 250 volumes and 50,000 pages. More than 1.4 million pages of manuals exist worldwide at maintenance facilities. These manuals contain operating instructions, which direct technicians on how to fix, fly and maintain aircrafts. Online instructional manuals are also available on any workstation, or laptop, which can read CDs. Updating these different versions using paper updates is slow, costly and generates paper waste when the old pages are discarded and replaced with new pages. This problem has highlighted the need to replace the old with something new: electronic technical manuals.

- Easy access to country-specific manuals via laptop PCs, and improved access using hyperlinks and electronic word/phrase searches.
- Troubleshooting data, which is easily transported to the flight lines.

Once electronic manuals are delivered, our

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by Going Electronic

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forests will breathe a sigh of relief, as the benefits of these online manuals become more evident to F-16 customers around the world. Not only is Lockheed Martin promoting waste prevention, F-16 customers will now have speedy access to current and accurate technical data as compared to the old database revision process. With electronic data residing in a common database, updating occurs more frequently and at a less cost. Cache servers within each base can download their re-

quired information from a central source. Information can be within a fingertip's reach of maintenance personnel when electronic manuals are loaded, the laptop hard drive from compact disc or as a server download.

and conversion tool known as VISTA (Virtually Integrated System for Technical Authoring). VISTA converts legacy databases into a standard electronic format. More specifically, it enables technical authors to update existing technical manuals across multiple configurations with minimal human involvement. This avoids laborious text keyboarding and quality control editing, which essentially eliminates inconsistencies across multiple versions of documents for each country. After a rigorous quality review, any translation error potential is minimized, and the database is approved for further updates.

Regarding future improvements, Michael Nipper, manager of enterprise communications for Lockheed Martin said, "On the user side, there will be widespread use of electronic technical data, particularly with portable computers.

quired information from a central source. Information can be within a fingertip's reach of maintenance personnel when electronic manuals are loaded, the laptop hard drive from compact disc or as a server download.

In terms of what is yet to come, Lockheed Martin has invested in developing a publishing

Aircrafts will have much greater on-board diagnostics and can relay their maintenance needs via data link before returning to base. On the development side, there will be a greater ease of creating and linking diagrams and figures from the computer design electronic databases, which are rapidly replacing engineering drawings. For transmission, high bandwidth transmission (fiber optic or satellite relay) and secure websites will replace CDs in the mail." ■

Announcing the 2004 Closing the Circle Award Winners

OFEE is pleased to announce the winners of this year's *White House Closing the Circle Awards*, which recognizes outstanding environmental stewardship through pollution prevention, recycling, green purchasing, sustainable building, and the use of environmental management systems. **The summer issue of CTC News will spotlight these success stories more extensively.** Thank you to all of the agencies who submitted a nomination this year for making the *2004 CTC Awards* so competitive!

The following are the *2004 Closing the Circle Award* Winners by category:

Sustainable Design/ Green Building

Dept. of Defense, U.S. Army Yuma Proving Ground, AZ,

YPG Energy Efficient Model Home

Dept. of the Interior, Chincoteague National Wildlife Refuge, VA,

Going Green Over Buildings at Chincoteague NWR

Environmental Management Systems

Dept. of Defense, Fort Bragg, NC,

The Right Way, The Green Way, All the Way!

Dept. of Energy, Battelle Memorial Institute, Lab Ops Group, OH,

Corporate Commitment to Environmental Stewardship and Environmental Management Systems

Recycling

Dept. of Defense, Tinker Air Force Base, OK, Solid Waste/Recycling Team,

Rejuvenation of Base Recycling Program at Tinker AFB

Dept. of Defense, Vandenberg Air Force Base, CA, Mr. Patrick Maloy,

Vandenberg AFB QRP Exceeds 90% Diversion Rate

Dept. of Justice, Federal Correctional Complex, Coleman, FL,

Recycling Program at the Federal Correctional Complex, Coleman, FL

Waste/Pollution Prevention

Dept. of Defense, Robins Air Force Base, GA, Environmental Management Directorate,

Taking Strides Forward in Pollution & Waste Prevention at Robins AFB

Dept. of Homeland Security, Federal Law Enforcement Training Center, GA,
Green Ammunition

New Mexico Veterans Affairs Healthcare Systems, NM,

Mr. Mark Boyers, Hazardous Waste Reduction at the NM VA Healthcare System

Green Purchasing

Dept. of Defense, Homestead Air Reserve Base, FL,

Environmentally Friendly Products Section at Homestead Air Reserve Base Store

Dept. of Energy, Sandia National Laboratories, NM,

Five Keys to Success: Continuous Improvement for Construction Purchases

EPA Designates Seven Recycled Content Products for Federal Purchasing

In the April 30, 2004 *Federal Register*, EPA issued the fourth update to its Comprehensive Procurement Guideline (CPG), designating seven recycled content products:

- Modular threshold ramps
- Non-pressure pipe
- Roofing materials
- Office furniture
- Rebuilt vehicular parts
- Bike racks
- Blasting grit

In addition, EPA revised the designations for cement and concrete, railroad grade crossing surfaces, and polyester carpet. In the case of the first two, EPA adding new recycled content options. In the case of polyester carpet, EPA revised the designation to "polyester carpet for moderate end-uses" only. EPA also issued recycled content recommendations for all seven products in a related Recovered Materials Advisory Notice. The requirement to buy these products containing recycled materials kicks in on May 2, 2005.

Both the CPG and the RMAN are available on OFEE's web site, www.ofee.gov, in the Green Purchasing section. ■

Travis Dormitory Recycling Program Success

Located in Solano County, California, Travis Air Force Base is home to the world's largest military airlift unit, the 60th Air Mobility Wing, and also serves as the home base for the Wing's reserve counterpart, the 349th Air Mobility Wing. In an effort to increase recycling within the base's 22 dormitories, the 60th Civil Engineer Squadron's Environmental Flight recently introduced a new recycling program for its 1,600 dorm residents.

The new program consists of small, blue bins that are issued to each resident, who then fill them with recyclable materials, such as beverage containers. Once the small bin is full, residents simply transfer the contents to a large toter in their storage area. Each Friday, the dorm crew transfers the materials from the toters, and the materials are picked up and taken to the base's recycling center.

Before trying this new approach, Travis used stackable bins located on each dorm floor. Although the bins were intended for commingled containers, white paper, and newspaper/magazines/phone books, respectively, most residents filled the bins with trash. By contrast, the small bin are located within each dorm room.

"One of the reasons this program has been so successful is because it's more convenient and easy than past programs," said Dolores Tiburcio, Travis Recycling Program manager. "These new blue bins have a handle for easy lifting and can fit right under the sinks of dormitory residents, so

they don't have to walk down the hall and put their recyclables into a centrally localized sorting bin; they just keep it in their room until it's full." There is more accountability for recycling because each individual has a bin.

Since its implementation in June of 2004, the amount of recyclable materials collected by the base has sharply increased. The amount of aluminum collected increased by nearly 200 pounds, rising from a little over 1,000 pounds in January to 1,242 by September. Glass collection increased the most, from 1,300 pounds in January to nearly 3,500 pounds by September.

The idea for the new program came from a similar success in Napa City in using the small bins in apartment complexes. "It worked for them," Ms. Tiburcio said. "So I thought, hey, that would be great for the dorms on base."

In addition to recovering materials for recycling, the program provides revenue that the dorms use to purchase items such as new DVDs and video games that the residents are able to sign out. The dorms also use some of the funds for self help projects, such as purchasing flowers for the flower beds. Since they started using the blue bins, each dorm is averaging anywhere from \$10 to 20 each week.

For more information about implementation of the Travis dorm recycling program, contact Dolores Tiburcio at Dolores.Tiburcio@travis.af.mil. ■



Use of the small blue bins allows for easy collection and transfer of recyclables from dorms to collection areas.

Greening our Landscapes

In previous issues of *Closing the Circle News*, we reported on Federal facilities' use of compost teas and other techniques to manage golf courses and other green areas. Recently, the U.S. Environmental Protection Agency launched the "GreenScapes" initiative to promote environmentally beneficial landscaping practices for large land-use activities such as shopping and retail centers, recreational facilities (e.g., golf courses, ski resorts, amusement parks, public gardens), roads and highways, abandoned industrial sites (i.e., Brownfields), large university campuses, and military installations.



GreenScapes is designed to help preserve natural resources and prevent waste and pollution by encouraging companies, government agencies, and other entities to make more holistic decisions regarding waste generation and disposal and the use of land, water, pesticides, and energy. By focusing on the "4 R's" - reduce, reuse, recycle, and rebuy - this program can help improve both an organization's bottom-line and the environment. (Rebuying means re-thinking current purchasing habits.) GreenScapes will promote practices and products that still meet the users needs but have a better environmental profile than current product purchases. A key element is consideration of the use of biobased products, recycled content products, and other environmentally preferable aspects in landscape construction, operation, and maintenance purchasing decisions.

The GreenScapes Alliance

The GreenScapes Alliance is a major effort to broaden and enhance waste reduction in nationwide land use. The Alliance aims to combine government and industry into a powerful, unified influence over the reduction, reuse, and recycling of waste materials in land use activities. More than 100,000 businesses are potential participants in the Alliance.

The GreenScapes Alliance emphasizes a holistic, multimedia view of environmental impacts and stewardship. In addition, the Alliance:

- Provides information about the cost savings that can be achieved from reducing material use and waste, resource conservation, and on the performance and durability of green products, such as recycled content and biobased products;
- Educates land managers that environmentally beneficial landscaping efforts yield water and energy savings, conserve landfill space, and reduce greenhouse gas emissions;
- Publicizes case studies, success stories, and technical assistance to help alleviate concerns regarding alternative

practices and products; promotes market expansion and growth of recycled content and biobased products;

- Awards organizations that achieve environmental excellence in reduction, reuse, recycling, and rebuying for waste prevention and pollution prevention.

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Benefits of GreenScaping

EPA notes that green landscaping practices can save money, reduce waste, conserve water, reduce energy usage, and reduce the emissions of greenhouse gases.

Cost Savings

Green landscaping has both long-term and short-term cost benefits. It means buying fewer products and switching from disposable products to more durable and reusable products. Buying durable goods might be more expensive at the time of purchase, but over the life of your landscape, maintenance, repurchasing, and tipping costs will go down, saving your facility money.

As many Federal facilities have found, composting results in savings on disposal costs and provides a usable soil nutrient. Compost adds disease-suppressing properties to soils, reducing the need for pesticides. Even a move as small as leaving grass clippings on the lawn after mowing can save big bucks ñ lowered disposal costs and, because decomposing grass pieces return valuable nutrients to the soil, lowered fertilizer costs.

Waste Reduction

Millions of tons of waste materials are hauled away, buried, or burned each day from landscaping and grounds

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New Effort to Reduce Federal Agency Usage of Five Priority Chemicals

On March 18, 2004, EPA issued a guidance memo urging Federal agencies to reduce their use of five chemicals: cadmium, lead, polychlorinated biphenyls (PCBs), mercury, and naphthalene. In order to reduce Federal agencies' usage of harmful chemicals, section 503(b) of Executive Order 13138, "Greening the Government Through Leadership in Environmental Management," directed EPA to develop a list

of priority chemicals used by the Federal Government that may result in significant harm to human health or the environment and that have known, readily available, less harmful substitutes for identified applications and purposes." The E.O. directs Federal agencies to develop and

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Organizations can participate in the GreenScapes Alliance as Partners and/or Allies. Partners include companies, agencies, and others who, in joining the program, commit to undertaking a minimum of two GreenScapes activities. Allies include professional groups, trade associations, research organizations, and product manufacturers or marketers who, in joining the program, will work with their affiliated organizations to promote greater use of GreenScapes

activities. Both Partners and Allies will be eligible for awards recognizing their activities, particularly documented increases in pollution prevention and preservation of natural resources in landscaping.

Information about both the GreenScapes program and the Alliance can be found at: www.epa.gov/greenscapes or by contacting Jean Schwab, GreenScapes Program Manager, by telephone at 703/308-8669 or by email at schwab.jean@epa.gov. ■

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keeping operations – trees, shrubs, brush, lumber, asphalt, and concrete, to name only a few. Millions of gallons of excess water, pesticides, fuels, and oils are in use each and every day. In addition to wasting valuable resources, these practices result in emission of greenhouse gases. Composting and other green landscaping practices help reduce greenhouse gases, save landfill space, and preserve natural resources.

Water Conservation

Green landscaping can reduce water usage while keeping plants green and healthy. Just maintaining an efficient irrigation system and adjusting the time of day that you water can save money. Planting native vegetation can reduce the use of water, fertilizer, and pesticides because native vegetation will be naturally hardier and more tolerant to local weather conditions.

There are also GreenScapes methods to reduce runoff of storm water and irrigation water that carry top soils, fertilizers, and pesticides into local rivers and lakes. Drawing from storm retention ponds supplies irrigation applications, as does installing rain barrels or cisterns to catch free rain water on and around buildings. These

options save water and money while reducing runoff, erosion, and non-point source pollution.

Energy Savings

Large amounts of energy are used in acquiring materials, manufacturing products, and shipping products. By purchasing fewer, more durable goods, an untold amount of energy can be saved.

Many green landscaping activities help reduce energy usage. Composting on site not only reduces the energy needed to transport organic waste to a landfill, but it eliminates the need for the production and transportation of fertilizers and often pesticides. Compost also absorbs water, reducing the amount of irrigation necessary and the energy required to transport the water. Strategic planting of vegetation around buildings can reduce indoor heating and cooling needs by creating shade.

Climate Impact

Most materials used on landscapes have an impact on our climate. Every landscaping product used emitted GHGs as it was manufactured and transported, and will continue to produce GHGs in a landfill as it decomposes. The constant buying and trashing of products regularly adds GHGs to our atmosphere and impacts the climate. ■

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support goals to reduce the usage of these chemicals by 50 percent by December 31, 2006.

According to Federal Environmental Executive John Howard, "The remainder of calendar year 2004 will be used to develop the baseline against which we will measure progress towards the goal of Section 503 and further refine existing assistance information."

There are known alternatives to the five priority chemicals or products containing them. For example,

electronic thermostats can be used in place of mercury-bearing switches. Solders containing copper or silver can substitute for solder containing lead. And integrated pest management can be used in place of naphthalene. Many of these alternatives are available from the General Services Administration and Defense Logistics Agency. As more information about alternatives becomes available, OFEE will post it in the Waste Prevention portion of its web site, www.ofee.gov. For additional information, please contact the chair of the E.O. 13148 interagency work group, Will Garvey, at 202-564-2458 or garvey.will@epa.gov. ■

NOAA Lights Up with Battery-less Flashlights

Imagine a waterproof flashlight that weighs less than a pound, is sealed so it does not produce a spark — and best of all, never needs batteries. Imagine no more. The NightStar™ Magnetic Force Flashlight from Applied Innovative Technologies, Inc. meets those requirements and yes, never needs batteries. The flashlight transforms motion into light.

According to Applied Innovative Technologies, when the flashlight is gently shaken, a high-strength, rare earth magnet passes smoothly through a wire coil, efficiently generating electrical energy. A heavy-duty capacitor, which can be recharged repeatedly, stores the energy and delivers the power to a super-bright white light LED. Thirty seconds of shaking provide more than 20 minutes of light. In total darkness, the flashlight will illuminate a 12-foot diameter area at 50 feet. The LED has an estimated service life of 100,000 hours, and the capacitor lasts up to 1,000,000 recharges.

Several units of the National Oceanic and Atmospheric Administration (NOAA) purchased 30 of these flashlights. The units — Marine Fisheries Science Center, Southwest Fisheries Science Center; Chief Administration Office, Western Regional Center; Marine & Aviation Office, Marine Operation Center-Pacific; and Chief Administration Office, Safety and Environmental Compliance Office — report that they work wonderfully! The flashlights are perfect for use on boats since they are waterproof, explosion proof, and float. In addition, the flashlights can be used as compasses. When the flashlight is placed in the water, the magnetic slug aligns the flashlight towards true north. Since using this flashlight, NOAA has eliminated the purchase and disposal of up to 180 D-cell batteries per year, a savings of \$120 per year.

Federal agencies can purchase NightStar Flashlights from the Defense Supply Center Philadelphia, 1-800-352-2852 or <http://www.dscp.dla.mil/gi/general/light1.htm>. For more information about the Nightstar Flashlight, go to www.nightstar1.com. ■



New Englanders Keep Warm Using Biodiesel Heating Fuel

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Although the use of petroleum heating fuel has declined since the 1970s, more than 8 million households in the U.S. continue to use heating oil to keep out winter's chill, with more than three-quarters of those users in the Northeast. Residential and commercial buildings consume over 90 percent of distillate fuel oil in the region, according to the Energy Information Administration. To reduce consumption of this fossil fuel, and its associated air emissions, the public school system in Warwick, RI, is blending heating oil with biodiesel, a domestically produced, renewable fuel.

Rhode Island may be the first state in the country to use a biodiesel blend to heat schools, according to Robert Cerio, energy educator/manager for the school district, a Rebuild America partnership.

Biodiesel, whose chemical name is methyl esters, is a fuel that is produced by removing glycerin from vegetable oil. In the United States, the most popular sources include soybean oil and recycled frying oil from restaurants. (Corn oil is the most popular for ethanol.) Although soybeans contribute to

the nation's food supply – cooking oil, veggie burgers and more – there is a surplus.

Biodiesel can be used in its pure form but is primarily blended with other fuels, such as petroleum diesel. Biodiesel blends are most commonly used for transportation fuel in school buses and government vehicle fleets.

Warwick's Blend

With support from Warwick Mayor Scott Avedisian and school system Superintendent Robert Shapiro, Cerio tested three blends of petroleum heating oil and biodiesel fuel to heat three schools in 2001. A fourth school used heating oil alone, serving as the control group. The project was supported by the Rhode Island State Energy Office, the Northeast Regional Biomass Program and DOE's National Renewable Energy Laboratory.

After using different mixtures of heating oil and biodiesel, Cerio determined that a blend of 80 percent distillate fuel oil and 20 percent biodiesel was the best combination for the school district's equipment. The fuel, known as B20, burned more efficiently and produced less harmful emissions than heating oil alone. Other advantages of B20 are that no equipment modification is necessary to burn the fuel, and it has a Btu content similar to heating oil. The school district now burns B20 in the heating system at one school.

Bacharach Inc. tests for efficiency and emissions every month. By switching to B20, the school is reducing carbon dioxide, carbon monoxide and nitrogen oxide emissions. Because biodiesel does not contain sulfur, the use of B20 results in a 20 percent reduction in sulfur discharge.

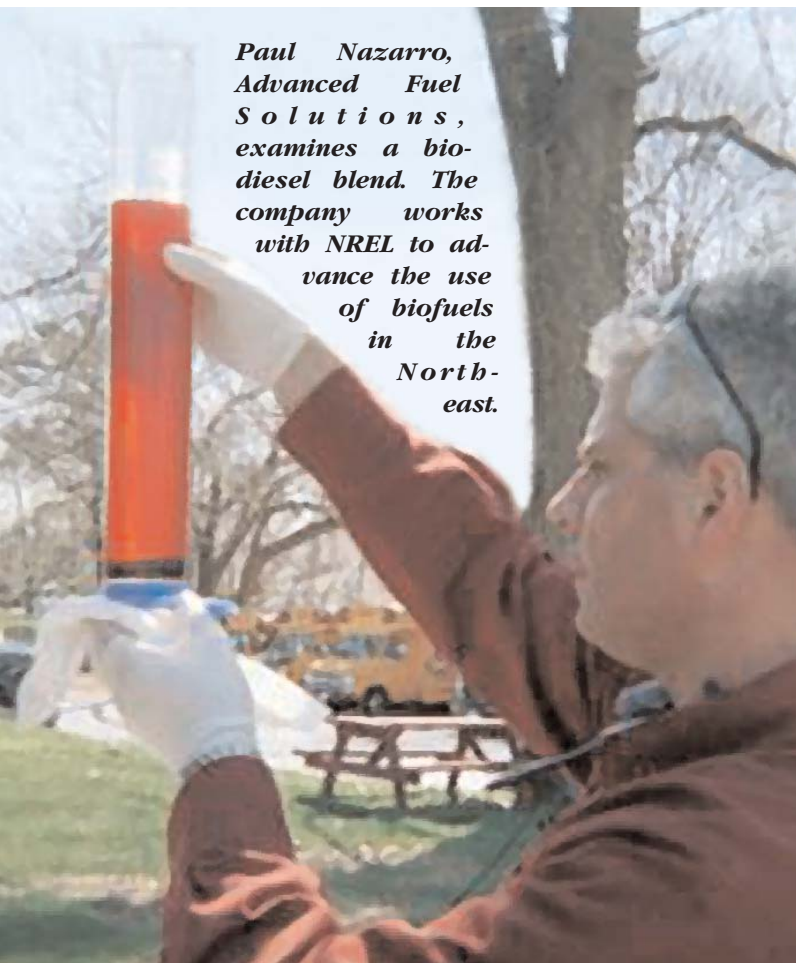
Warwick Public Schools buys its biodiesel from World Energy Alternatives, in Chelsea, MA. The fuel, processed in Florida, comes from soybeans grown in various locations throughout the U.S. Cerio blends it on site with heating oil.

Blending biodiesel adds 7 cents per gallon to the final cost, a good buy for the environmental benefits and reduced maintenance, says Cerio.

Maine Tries It

Farther north, in Maine, the state government announced it will use B20 in four or five state buildings this winter. The state recently ran a test on one of the boilers, producing positive results.

The use of biodiesel is part of Gov. John Baldacci's commitment to advance Maine as a leader in the use of renewable energy, explains Beth Nagusky, the state's director of energy independence. The state supports the use of the fuel because it is domestically produced, renewable and produces fewer harmful emissions than petroleum heating



Paul Nazarro, Advanced Fuel Solutions, examines a biodiesel blend. The company works with NREL to advance the use of biofuels in the Northeast.

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Thinking Outside the Boxes — Earth Day and Electronics Recycling Collections

For Earth Day 2004, OFEE once again partnered with the DC Office of Recycling to sponsor an electronics collection event, including cell phone collection. This year, we added collection of batteries, athletic shoes, and beverage containers. We began the collection event on Earth Day itself by collecting materials during our annual inter-agency Earth Day celebration in Rawlins Park in Washington, DC. During that four-hour event, we collected 500 soda cans, 40 pounds of cell phones, and 75 pounds of batteries.

But the hard work was yet to come. On Saturday, April 24, 2004, OFEE and the DC Office of Recycling co-hosted a six-hour e-cycling collection event at Carter Barron Amphitheatre in

Washington, DC. We collected electronics, athletic shoes, batteries, cell phones, and beverage containers from more than 600 vehicles. With help from the enthusiastic members of the DC Divas women's football team, we collected three tractor-trailers' worth of electronics, 375 pounds of cell phones and accessories, and half a ton of used athletic shoes. The event was made possible by generous support from Dell, and in collaboration with the Department of the Interior, the National Park Service, UNICOR, the National Park Foundation, AT&T, and others. The DC Office of Recycling plans additional athletic shoe collection events at DC government offices and universities located in the District. ■

Biodiesel and Warranties

A potential concern for biodiesel is the issue of equipment warranties. Manufacturers need to agree that the warranties they provide with heating equipment will not be violated by the use of biofuels. Such warranty statements are being discussed by industry representatives. Because of tests such as those at Warwick Public Schools, biodiesel advocates do not anticipate trouble in winning the needed warranty statements for appropriate blends such as B20. ■

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oil. Nagusky says she even used a biodiesel blend to heat her home last winter.

Back in Rhode Island, Warwick Public School's three-year program of using biodiesel blends for heating ends [in] March [2004]. Cerio hopes to continue the project by expanding the use of B20 from one building to 13. "It's been a really big success for us," he says. The school district also began using a B5 blend in its fleet of 70 school buses earlier this year, with support from DOE's Clean Cities program.

"Biodiesel creates jobs on the production end, supports farmers and is totally organic," says Cerio. "It's a win-win for the environment and the economy."

For more information, contact Robert Cerio, at cerior@wpsadmin.org or visit the National Biodiesel Board's Web site. ■

Recent Biodiesel Research and Testing in Heating Oil Applications

The National Biodiesel Board recently reported on two other projects to test the use of biodiesel in heating oil applications.

Massachusetts Oilheat Council (MOC): Test results released in September 2003 by MOC and the National Oilheat Research Alliance found that a blend of 80 percent low-sulfur heating oil and B20 reduced sulfur oxide emissions by as much as 80 percent or more. Nitrogen oxide emissions were lowered by about 20 percent. In addition, carbon dioxide emissions can be lowered by 20 percent.

"We are committed to expanding this work and will continue to define the critical next steps in bringing fuel and equipment innovations to the residential home heating market," said Michael Ferrante, President of the Massachusetts Oilheat Council.

New York State Energy Research and Development Authority (NYSERDA): Testing done in 2001 at Brookhaven National Laboratory on both a commercial and residential boiler found that biodiesel use (at various blend levels) resulted in lower carbon monoxide and nitrous oxide emissions. Another study being funded by NYSERDA and conducted by Abbott and Mills, Inc., a fuel oil dealer, is currently heating 100 homes in Newburgh, NY with B20. Now in its third heating season, no problems have been reported and they have just started using B100 to heat their office building. NYSERDA is expected to begin two more biodiesel-related tests in the near future – one at Theodore Roosevelt-Sagamore Hill National Historic Site in Oyster Bay, NY and the other, conducted by ClickableOil.com, is a marketing and technical demonstration of B20 in the New York area. ■

Going Green Online: Federal Agencies Make Buying Green Office Supplies Easy

Like many Federal agencies, EPA buys most office supplies from a variety of sources using individual purchase cards. Unfortunately, this prohibits the agency from receiving group discounts. In addition, due to the limited purchasing information available from credit card companies, it is difficult to track and manage what specifically is being bought with EPA's purchase cards. Moreover, it is challenging to train the thousands of purchase card holders on how to buy "green" products in accordance with Federal green purchasing requirements; ensure they will remember to ask about the environmental attributes of each product they consider buying; and get the answers they need from each vendor in a timely fashion so they can buy products that meet EPA's performance, cost, and environmental requirements. As the agency responsible for protecting human health and the environment and for administering the Environmentally Preferable Purchasing (EPP) and Comprehensive Procurement Guidelines (CPG) Programs, EPA decided it should green its own purchases of office supplies by greening its upcoming office supplies blanket purchase agreement (BPA).

In March, EPA launched an effort to purchase all non-electronic office supplies via an agency-specific e-catalogoan online directory of products and services available for sale under a pre-negotiated BPA with a commercial vendor, Corporate Express. EPA purchase card holders use the EPA e-catalog, www.epasupplies.com, to select from a large array of office supplies, including those that meet the CPG requirements for recycled-content and the Executive Order 13101 mandate to purchase environmentally preferable products and serviceso products and/or services that have a lesser or reduced impact on the environment and human health, when compared to competing products or services that serve the same purpose.

To develop its e-catalog, EPA identified and interviewed procurement and environmental staff from several government agencies that already have e-catalogs in place for purchasing office supplies and, in some cases, direct their purchasers to buy green products. The lessons learned from

these interviews are available in a report, *Buying Green Online: Greening Government E-Procurement of Office Supplies*. It includes federal agency success stories, EPA's green criteria for office supplies, EPA's RFP language for its BPA, and a chart describing a range of federal office product e-catalogs.

To improve tracking of purchases and ensure they are taking advantage of requisite group discounts, some of the agency representatives EPA interviewed have made their agency's e-catalog the only authorized mechanism for the purchase of office supplies. Others have limited the products available via their e-catalog to those that meet EPA's recycled content guidelines in an effort to increase the purchase and use of green products.

Although other government agencies have set up successful programs for encouraging the online purchase of green office products, EPA's green purchasing criteria, located in Appendix A of *Buying Green Online*, are more comprehensive than those of other agencies. EPA will modify and augment these green purchasing criteria as office products with additional positive environmental attributes become available. EPA's BPA also requires recycling of all used toner cartridges and batteries. Vendor evaluation criteria used in the award of the BPA included having an environmental management system in place or in development and having green fleet purchase and maintenance programs.

"Buying office supplies through this new system eliminates the big 'ifs' from the process. When purchase card holders buy through this online e-procurement system, it's guaranteed that they are buying products that meet Federal green purchasing requirements - and other government purchasing requirements as well. We've created a win-win green solution that will work for everyone," said Kerrie O'Hagan, EPA's Purchase Card Program Manager.

To view EPA's *Buying Green Online* report, visit www.epa.gov/epp/pubs/buying_green_online.pdf. For more information, contact Holly Elwood of EPA at (202) 564-8854 or elwood.holly@epa.gov. ■



Maximizing the Use of Re-refined Oil

By Joe Gerhart, Chief, Fleet & Transportation Services Division, Transportation Security Agency

Section 6002 of the Resource and Recovery Act (RCRA) requires the use of re-refined oil in motor vehicles. To meet this requirement, the Transportation Security Agency's first fleet manager initiated a streamlined re-refined oil process to maximize the use of re-refined oil during scheduled maintenance oil changes. One of the keys to success is educating TSA fleet representatives in the field about why using re-refined oil is required. TSA is using its maintenance notification process to educate the field fleet representatives about the different ways in which re-refined oil can be provided by the vendor or purchased directly from the Defense Supply Center Richmond for use by the vendor.

Here is a sample of how the process works:

- A Schedule Maintenance Card (SM) is sent out to TSA field fleet representative notifying the due date for a Re-refined Oil Change.
- The SM Card informs the TSA fleet representatives that major manufacturers have stated that the use of re-refined oil with the API rating will not void the warranty on their vehicles.
- The SM Card informs the representative to seek out a local vendor who normally may stock re-refined oil, such as Goodyear Tire Service Centers, Jiffy-Lubes, Grease Monkeys, or other local vendors. Vendors can obtain re-refined API oil by contacting the suppliers listed in the Green Purchasing section of the Office of the Federal Environmental Executive's (OFEE) website.
- The SM card provides links to OFEE resources and the Defense Supply Center Richmond.

- The SM card asks the TSA field representative to explain the reason WHY re-refined oil was not used if the field representative used virgin oil.
- If TSA field representatives return an SM card indicating that virgin oil was purchased, TSA headquarters contacts the TSA field fleet representatives to:
 - Inform them of the importance of using re-refined oil,
 - Direct them to order re-refined oil from Defense Supply Center Richmond, and
 - Direct them to contact the local service station and ask for vehicle maintenance service using TSA-supplied re-refined oil.

The process is simple and effective. For example, Sheron LeFebvre, TSA's Administrative Officer in Tallahassee, Florida ordered a case of re-refined oil from Defense Supply Center Richmond, which she received within five days. She negotiated with the local Goodyear service station and was only charged the labor and oil filter charge for the maintenance service. The three TSA owned vehicles were serviced promptly with re-refined oil. Sheron stated that it was simple and appreciated the assistance with the process.

TSA headquarters is already using re-refined oil in its vehicle loaner fleet and plans to continue educating its fleet representatives. TSA also is tracking its oil purchases to monitor compliance with RCRA.

For further information on TSA's re-refined oil program, contact Joe Gerhart at 571-227-2064 or email: joseph.gerhart@dhs.gov. ■



Transportation Security Administration

Navy Cooks Up Biodiesel

The United States Navy is the world's leading consumer of diesel fuel, but a Navy facility in California is working to reduce the use of this resource. The Naval Facilities Engineering Service Center in Port Hueneme, CA opened the first ever biodiesel refinery at a U.S. military installation in October 2003. The refinery converts used cooking oil generated by restaurants into cleaner burning biodiesel fuel and is small enough to fit in the back of a pick up truck.

The biodiesel demonstration production project at Port Hueneme is a partnership among the Navy Facilities Engineering Service Center, Biodiesel Industries, Ventura County, CA, and Channel Islands National Park. The Navy and Biodiesel Industries, the two leading partners, implemented a program to develop and execute a biodiesel production facility deployable at any global military facility. Ventura County and Channel Islands National Park are partners in the testing and utilization of the fuel in field applications.

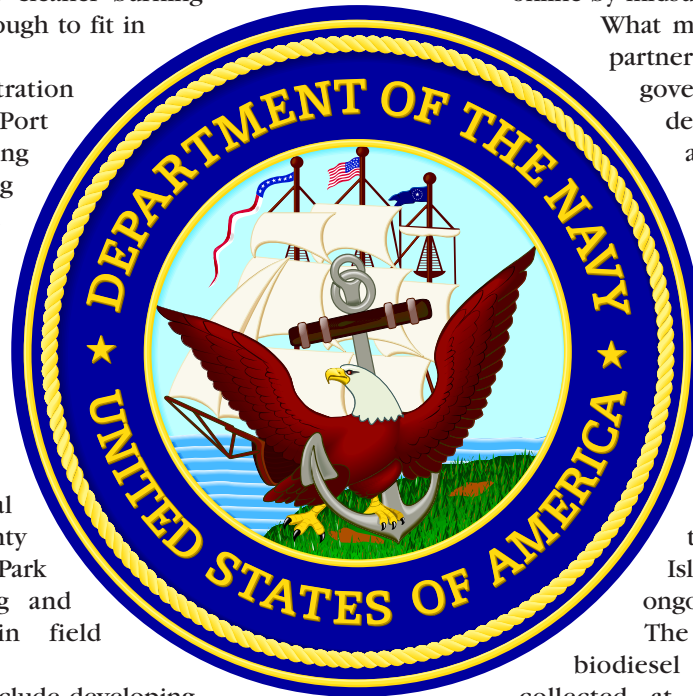
The goals of the project include developing the physical plant, testing production methods using a variety of feed stocks, confirming the quality controlled production process, testing emissions of biodiesel fuels, and field testing and demonstrating the production biodiesel. An

equally important aspect is the educational and technological exchange opportunities created by this project.

Presently, a small test production facility is producing 300 batch units of biodiesel for testing purposes. The plan is to bring the larger, 3,000 gallon-per-day production facility online by midsummer.

What makes this project unique is the partnership created with industry, local government and between Federal departments. The Environmental and Energy Resources Department of Ventura County (formerly the Waste Management Office) will use the fuels in a variety of fleet applications. Additionally, it will assist in the coordination of collection of used (postconsumer) oils, which will reduce disposal in local landfills. The biodiesel fuel will be used on the base, in the local area, and by Channel Islands National Park as part of its ongoing biodiesel project.

The circle will truly be closed as biodiesel produced from used oils collected at the galleys and McDonalds restaurant on the Navy base, along with oils from within the county, are used to reduce local dependence on nonrenewable fuels. If successful, the project would significantly increase the Navy's use of a renewable fuel. ■



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