

Biobased Solutions

Volume IV, Number 4, Fall 2005

FOR GOVERNMENT



Dear Reader:

The United Soybean Board is pleased to offer resources to you that make it easier than ever to integrate biobased products into your procurement efforts. We thank the numerous government employees who helped us produce our latest and most comprehensive resource. USB's new one-of-a-kind *Biobased Products Best Practices Guide* is available online at www.soybiobased.org as well in CD-ROM and print formats.

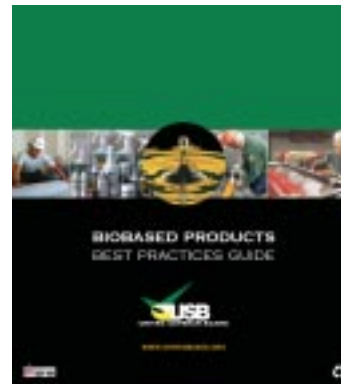
This resource and other USB materials came hot off the presses as the nation responded to two hurricanes and President Bush issued a directive to government agencies to conserve energy. Go to page 2 to find out more about how biobased products can be a tool for agency responses to the President's directive.

I also hope you will go to page 4 to read how Chris Case at Pictured Rocks National Lakeshore has won yet another honor for his work to champion biobased products far beyond the borders of the national park where he is a facility manager. Thanks to Chris' leadership, at least 1000 other government employees have heard about how biobased products can have environmental benefits—while working just as well as traditional products.

Sincerely,
Chuck Friedrich
Domestic Marketing Committee Chair

New Best Practices Guide Available to Government Purchasers of Biobased Products

Government employees have a new resource to help expand or implement biobased products procurement. The United Soybean Board (USB) has worked closely with many government employees to create the 230-page *Biobased Products Best Practices Guide*, which is available for free at USB's website www.soybiobased.org as well as in CD-ROM and print versions.



The *Best Practices Guide* contains a cross section of official policies of multiple

Federal agencies and their training programs. It also offers sections on contracting and awards programs that encourage the use of biobased and other green products. The *Best Practices Guide* has sections on integrating biobased purchasing programs with other preferential purchasing plans, such as recycling, and methods of reporting and tracking these activities. Finally, it tells the reader how to find biobased products and provides numerous case

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White House Award Category to Require Biobased Products Use

The Office of the Federal Environmental Executive (OFEE) has posted its instructions for the 2006 White House Closing the Circle Awards program for federal employees. **OFEE now requires the use of biobased products in the Green Purchasing Category.** The awards are designed to reward government trailblazers and leaders in biobased product purchasing in the federal government. "Nominees must demonstrate how they started to purchase biobased products through pilot projects, product testing, educa-



tion and outreach to facility staff, development of solicitation or contract language, etc.," states OFEE on its website that offers additional details at www.ofee.gov/ctc/ctc.htm ■

Biobased Products Can Assist in Meeting White House Directive to Conserve Energy



In the aftermath of Hurricanes Katrina and Rita, President George W. Bush issued a directive to all heads of executive departments and agencies, "...to take appropriate actions to conserve natural gas, electricity, gasoline, and diesel fuel to the

maximum extent consistent with the effective discharge of public responsibilities." Biobased products can play a role in this effort as well as the overall goal of reducing U.S. dependence on foreign petroleum.

The President's memorandum also said, "A key component of this Administration's hurricane response plan is to ensure that sufficient supplies of natural gas, gasoline, and diesel fuel are available throughout the country, including in those areas hardest hit by the hurricane, as well as in those areas served by refineries and pipelines originating in the affected areas."

It continued, "Federal agencies should also take action to conserve natural gas and electricity during periods of peak consumption by shifting energy-intensive activities to non-peak periods wherever possible and by procuring and using efficient ENERGY STAR-rated energy intensive appliances and products."

"In addition, agencies should review their existing operating and administrative processes and conservation programs and identify and implement ways to reduce overall fuel use," the memo directed.

Agencies are called to report to the President through the Secretary of Energy on the fuel conservation actions taken. In response to the directive, Secretary of Energy Samuel W. Bodman deployed teams of energy experts to Federal facilities to identify ways to save energy.

Biobased products can help meet the President's request. Soybean oil, for example, is often substituted in part or wholly for petroleum in more than 40 product categories. In addition, two types of building and maintenance products actually help cut energy use. They are the relatively new soy-based foam polyurethane insulation and roof and other coating products applied to natural bitumen, cement and metal surfaces.



Soy-based Spray Foam Insulation

Soy-containing spray foam insulation can be applied to walls, in attic spaces, and under floors in both commercial and residential buildings. The insulation expands when applied to fill all spaces tightly. Manufacturers include:

■ **Biobased Systems** makes BioBased 501, which is a 0.5 lb/ft³ semi-open cell insulation with an R-value of 4.0 per inch. According to the manufacturer, the product has excellent thermal and sound insulating properties, and when applied, creates an effective air tight seal which guards against air infiltration, the number one source of energy loss in a structure. According to Biobased Systems, BioBased 501's R-values do not deteriorate over time and the product allows for the use of smaller, less expensive heating and cooling equipment, decreases heating and cooling costs, does not support mold growth and provides no food value or nesting materials for insects or rodents.

■ **Urethane Soy Systems** makes SoyThermTM 50, an open-celled insulation with a density of .047-0.55 lb/ft³ and an R Value of 3.7 per inch. According to the manufacturer, the R-values do not deteriorate over time and the product →

provides an effective seal against air infiltration to further reduce energy loss and reduce heating and cooling costs, can reduce the size of required heating, ventilation and air conditioning (HVAC) systems and can reduce other building material costs, and provides no food value for insects or rodents

Contact Information:

BioBased 501: BioBased Systems,

(800) 803-5189, www.biobased.net

SoyTherm™ 50: Urethane Soy Systems,

(888) 514-9096, www.soyol.com

Roof Coatings

Soybean oil polymer-based roofing and waterproofing membranes can be applied to low slope roofs, masonry, or metal surfaces to waterproof and rustproof these underlying materials. According to the manufacturer of the product line, Green Products, LLC, when used in roof restoration or new roof construction, the products:

- Are “ENERGY STAR”-approved, having received the Environmental Protection Agency and Department of Energy national symbol for energy efficiency and are California Title 24 compliant.

- Reflect heat from the sun, reducing the amount heat absorbed and therefore reduces the amount of air conditioning required to cool buildings.
- Extend roof life by providing a 100% waterproof surface immediately upon application.
- Are ASTM International (originally known as American Society for Testing and Materials) and Underwriters Laboratories (UL) tested as well as field tested for more than 10 years.
- Are California Volatile Organic Compound (VOC) compliant and qualified for the California Cool Roof Program
- Can contribute to multiple credit opportunities under the LEED™ Green Building Rating System™ requirement to incorporate 5% rapidly renewable materials
- Can be applied by spraying, rolling, or brushing without the need for expensive equipment.
- Are available in multiple product grades to accommodate the multitude of different roofing assemblies on the market.

Contact Information:

Environmental Liquid Membrane System® (ELMS®)

Grant Gable, Green Products, LLC,

(877) 474-7481, www.greenproducts.net



KV Pharmaceuticals' St. Louis facility had a rapidly deteriorating 230,000 square foot roof. By using Green Products' ELMS®, they expect to reduce their HVAC energy consumption by 20-30% while reducing maintenance costs and saving the roof. Here's how it works according to Green Products' Grant Gable:

- The overall thermal load on the roof is reduced from temperatures as high as 160-180 degrees on a hot, humid summer day to 95 degrees,

which is the ambient temperature level that most heating, ventilation and air conditioning systems are calibrated to work at peak efficiency. This automatically reduces energy use

and reduces maintenance because the system is not being “overworked”.

- What's more, because of the nature of the pharmaceuticals, the inside temperature of the building must be kept at a constant 68 degrees F for quality control.

For more information on these products go to www.soybiobased.org, click on “Newsletters,” Fall 2003, for ELMS® and Summer 2004 for insulation (Homeowners Model Soy-Based Foam Insulation); Click on “Product Information”, then “Building Construction and Renovation” for information on both types of products.



DOI Secretary Gale Norton (left) and Deputy Secretary P. Lynn Scarlett recognized Chris Case for his efforts that have communicated the value of biobased products to more than 1000 government employees.

Chris Case Wins DOI Award For Spreading the Biobased 'Gospel'

The Department of the Interior (DOI) presented its 2005 Environmental Achievement award to Chris Case, the facility manager at Pictured Rocks National Lakeshore in Michigan. Case accepted the honor during a ceremony in Washington, D.C. for his ongoing biobased products procurement outreach that has reached state and local agencies far beyond the 73,000 acre park located on the Lake Superior shoreline.

Case has institutionalized the Pictured Rocks comprehensive Bio-Fluids/Lubricants program. Created and managed by Case, the initiative showcases the effectiveness and benefits of bio-based fuels and lubricants

use at DOI facilities. For example, Case's program demonstrated that biodiesel works effectively even in Michigan's cold winter temperatures, which had been a barrier to biodiesel use at some DOI facilities.

He was one of three individual and eight team recipients of the coveted 2005 awards. "His most note-worthy accomplishment's is that he shares his knowledge and experiences with other facility managers in DOI and across the Government. Through his far-reaching education efforts, he has presented his lessons learned to nearly 1,000 government employees and officials who can duplicate his success," said DOI Deputy Secretary P. Lynn Scarlett in presenting the award to Case. ■

New Best Practices Guide Available

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histories describing how Federal government agencies are already buying biobased products.

"This one-of-kind resource will assist government agencies as they implement the 2002 Farm Bill, which requires all Federal government agencies to initiate a preferential purchasing program for biobased products," says USB Domestic Marketing Committee Chair Kent Gronlie. "We appreciate the tremendous input that federal employees gave us in compiling so much information into a single resource, and we look forward to updating it with the new examples and information that will be available as agencies progress with their biobased products procurement programs. This document will grow along with biobased products procurement."

The Guide is available at no cost on a compact disc, or it can be downloaded from www.soybiobased.org. Hard copies in a large, three-ring binder are also available by emailing unitedsoybean@kcegroup.com or by calling Karen Edwards at 703-281-7600. ■

The Energy Policy Act of 2005 supports development, purchase, and marketing of biobased products

President Bush signed the Energy Bill in August, and Title IX contains an Agricultural Biomass Research and Development Programs subtitle based on amendments introduced by Senators Tom Harkin (IA) and Richard Lugar (IN). The subtitle contains several provisions to increase federal support for the development, purchase, and marketing of biobased products. Go to www.soybiobased.org/policies for a listing of these provisions.

For more information write:
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www.unitedsoybean.org/newuses

Or call: 1-800-989-USB1 (1-800-989-8721) • Or E-mail: merker@smithbucklin.com

To reach Biobased Solutions for Government directly:

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Because of the potential for biobased products to create new markets for soybeans, U.S. soybean farmers have invested more than \$50 million to research, test and promote biobased products. Much of this work was done through the United Soybean Board (USB), which is composed of 64 U.S. soybean farmers appointed by the U.S. Secretary of Agriculture to invest soybean checkoff funds.

