

**DRAFT**  
**U.S. Department of Energy**  
**Quarterly Teleconference on Implementing**  
**Environmentally Preferable Purchasing Requirements**  
**July 22, 2004 11 a.m. - 12:30 p.m. (EDT)**

**TOPICS**

- Biobased product pilot project updates
- Technical questions on biobased products

**PARTICIPANTS:**

**U.S. Department of Energy Headquarters:** Mark Decot, Richard Langston, Don Lentzen, Laura Neal (BCS, Incorporated)

**Yucca Mountain Characterization Project:** Delane Fitzpatrick-Maul, Lee Bishop, Bruce Stanley

**Office of the Federal Environmental Executive:**

Dana Arnold

**U.S. Environmental Protection Agency:**

Sue Nogas

**ALBUQUERQUE OPERATIONS OFFICE:**

**Los Alamos National Lab:** Sonja Salzman

**Sandia National Laboratory – CA:** Laurie Farren

**Sandia National Laboratory – NM:** Kristin Klossner

**Waste Isolation Pilot Plant:** David Emery(?)

**CHICAGO OPERATIONS OFFICE:**

**Argonne National Lab:** Barbara Markwenas

**Brookhaven National Laboratory:** Peter Pohlott, CR Kroshna

**Pacific Northwest National Laboratory:** Sandra Cannon, Wayne Larson, Kevin Pfeifer, Linda Mesaros (Mesaros Assoc.)

**Princeton Plasma Physics Laboratory:** Tom McGeachen

**ENERGY EFFICIENCY REGIONAL OFFICES**

**Atlanta Regional Office:** Traci Leath

**Seattle Regional Office:** Kim Penfold, Carol Gates

**FOSSIL ENERGY:**

**National Energy Technology Lab (NETL):** Bruce Webster

**Naval Petroleum Reserves:** Casper (?)

**Strategic Petroleum Reserves:** Katherine Batiste, Dan (?)

**GOLDEN FIELD OFFICE:** Lincoln Capstick

**National Renewable Energy Lab (NREL):** Susan Huffnagle

**IDAHO OPERATIONS OFFICE:** Darrell Brown (INEEL), Anne Dustin, Phil Hayman, John Gill?

**NAVAL REACTOR SITES:**

**Pittsburgh:** Tony DeNapoli, Ron Sand

**NEVADA OPERATIONS OFFICE:** Al Karns

**OAKLAND OPERATIONS OFFICE:**

**Lawrence Livermore National Laboratory:** Bruce Campbell

**OAK RIDGE OPERATIONS OFFICE:**

**Oak Ridge National Laboratory:** Kathy Settles

**Oak Ridge Y-12 Facility:** Anne Ostergaard, Sara Cornwall

**Thomas Jefferson National Accelerator Facility:** Dennis Dobbins, Linda Even

**OHIO FIELD OFFICE**

**West Valley Demonstration Project:** Jennifer Dundas

**RICHLAND OPERATIONS OFFICE:** Oscar Holgado

**Hanford Site:** Joe Coenenberg, Bob Moore

**Office of River Protection:** Michael Royack

**ROCKY FLATS OPERATIONS OFFICE:** Doug Schlagel

**POWER ADMINISTRATIONS:**

**Southeastern:** Mary Bennett(?)

**Western:** Frank Armstrong

**WEATHERIZATION ASSISTANCE PROGRAM:** Michael Bednarz

Alex Moore (DNR International),

**BIOBASED MANUFACTURERS ASSOCIATIONS:**

**United Soybean Board:** Sueanne Pfifferling

**MANUFACTURERS/VENDORS:**

**BioBase 501:** Josh Hutchinson

**Southern Diversified Products:** Rocky Prior

**OTHER:** Dana Bigalowe, Janet Boulanger, Beth Cahill, Joe Lucas, McCluskey, Bob Premise

**MINUTES**

**DOE Buy Bio Initiative** - Mark Decot, DOE-HQ Buy Bio Program Lead

- Welcome to the meeting and introductions
- During the last call, Doug Kaempf and other DOE program leads discussed DOE's interest in the Buy Bio Program; the Biobased Manufacturer's Association gave a demonstration on their online supercenter for purchasing biobased products; and users of biobased products presented their experiences (see minutes of the April 27, 2004 teleconference for details).
- Today's call will focus on the technical aspects of using and buying biobased products.

**Federal Buy Bio Update-** Dana Arnold, Office of the Federal Environmental Executive

- USDA is working on the final version of the framework for designating biobased products for purchase by Federal agencies. It should be released by the end of fiscal year 2004 or the beginning of fiscal year 2005.
- USDA has begun work on a labeling program for biobased products. The label probably will not be available for a year.
- The Closing Circle Awards no longer have a separate award for biobased products. Biobased products will fall into the Green Purchasing award category, which will give preference to programs with a recycled product component and either a biobased product component or comprehensive environmentally preferable purchasing program.

**Status of National Bioenergy Center Labs Pilot Projects-** Mark Decot, DOE-HQ Buy Bio Program Lead

- The National Bioenergy Center (NBC) is made up of six national laboratories: Argonne, INEEL, NETL, NREL, Oak Ridge, and PNNL. These labs are leading by example in buying and using biobased products.
- Each NBC Lab has been asked to choose at least one biobased product in FY2004 to replace an existing product used at the lab and test its function and cost. Each lab has put together a team to conduct the pilot project with an NBC Lab Rep, Sustainability Rep, and Facilities Rep.
- ANL's team consists of Seth Snyder, Barb Markwenas, and Bob Whitman, who will be evaluating biobased paint and sorbents. INEEL's team consists of Tom Faust, Anne Dustin, and Phil Hayman, who will be testing biodiesel. NREL's team consists of Cindy Riley, Susan Huffnagel, and Tim Peele, who will also be testing biodiesel fuel. ORNL's team consists of Robin Graham, Susan Michaud, and Pamela Vasquez, who will be testing biobased cleaning products. PNNL's team consists of Don Stevens, Sandra Cannon, and Kevin Pfeifer, who surveyed all potential products that might be transitioned, are exploring use of biodiesel in grounds equipment, evaluating biobased cream abrasives, and testing biobased detergent for parts washers and biobased floor finish remover.

**Results of Biobased Detergent for Parts Washer Purchased by PNNL at Last**

**Teleconference-** Kevin Pfeifer, Pacific Northwest National Laboratory

- Due to a glitch in the Supercenter website, PNNL did not receive the product as planned. An additional barrier is that control of the parts washer being tested was recently changed. PNNL is therefore behind in the testing of the biobased detergent and will provide a full update during the next call.
- Question – Tom McGeachen: Are you trying to use an existing parts washer and a new biobased detergent, or are you retrofitting the parts washer with new equipment?
- Kevin Pfeifer: One existing parts washer will be tested and one will be retrofitted with new parts to use biobased detergents.

- Action - Sueanne Pfifferling: I will send a link to the company that modifies parts washers to use biobased products.
- Question/Action - Sandra Cannon: Would it be helpful to develop a list of parts washers that can take biobased products as is versus parts washers that need retrofitting? Will everyone please send a list of parts washers they have?
- Question, Barb Markwenas: Do parts washers separate oil products from other products?
- Kevin Pfeifer: Yes, parts washers are equipped with filters to catch particles.

**Pilot Project: Biobased Paint and Sorbents-** Barb Markwenas, Argonne National Laboratory

- Argonne is conducting two pilot projects: biobased paint and biobased sorbents.
- Currently no biobased paint is on the market. We will instead use a recycled paint that is lower in VOC emissions. If we can find a large enough group that wants to buy biobased paint, we may be able to encourage manufacturers to market it.
- A corn-cob based, multi-purpose sorbent will also be tested.
- Question - Sara Cornwall: What is the name of the sorbent?
- Barb Markwenas: Best Scots Absorbent from Independence, Iowa.
- For both products, we will use our product evaluation sheet <http://www.eh.doe.gov/p2/ap/epp-product-evaluation-anl.doc> to give us a record of the performance evaluation of new products to go hand-in-hand with the standard ES&H evaluations on regulatory compliance, OSHA, etc.
- Rocky Prior: I am a distributor of biobased paints. We have biobased paint but took it off the market because we have to charge a considerably higher price (\$34.95/gal.) until the volume of sales is large enough to cut the manufacturing costs. We could supply biobased paint at a reasonable price if we obtain a commitment for purchasing a large enough quantity, which would be about 10,000 gallons. My contact information is the following: [www.americanpridepaint.com](http://www.americanpridepaint.com), 601-264-0442, [rocky.prior@usm.edu](mailto:rocky.prior@usm.edu).
- Action – Barb Markwenas: See if the State of Illinois, Page County, City of Chicago, and Argonne National Lab could jointly make such a commitment.

**Pilot Project: Biodiesel-** Phil Hayman, Idaho Engineering and Environmental National Laboratory

- We are converting the 100 buses that take commuters to and from the surrounding communities to biodiesel buses. We currently have 12 buses using biodiesel and 2 trucks. Stage two of the test will be implemented over the next few weeks and will add 13 more buses and 9 more trucks to the biodiesel fleet. The test will run for 3 months. If there are no problems, the entire fleet will shift to biodiesel by October.
- While biodiesel fuel is more expensive (\$2.21/gal.) than regular diesel (\$1.75/gal), the extra cost is reduced with biodiesel using fewer gallons per mile. We are seeing a 5-15% mile

per gallon increase in fuel efficiency, which gives us a cost of \$0.??-0.??/mile for biodiesel compared to \$0.??/mile for diesel. So far we have 74,000 miles with no material failures, and both drivers and passengers have given positive feedback. The drivers say the buses have more power, and the passengers appreciate not having to deal with black smoke and diesel smell. The major concern with the pilot project is that the fuel will gel in colder temperatures. We are currently using B50 but will use B20 in the winter months.

- Question – Barb Markwenas: Are the higher costs of biodiesel worthwhile considering the benefits?
- Phil Hayman: We have not yet conducted such an analysis. The environmental and fuel economy benefits may offset the higher costs of biodiesel when we add the need for less oil.
- Question - Kristin Klossner: What were the major arguments from the drivers, if any, against biodiesel?
- Phil Hayman: Mainly resistance to any type of change and lack of knowledge about biodiesel.
- Question: What is B20?
- Phil Hayman: 20% biodiesel, 80% regular diesel.
- Question: Do you have any GSA vehicles or are they privately owned? Warrantees are an issue.
- Phil Hayman: They are all privately owned.
- Suanne Pfifferling: The National Biodiesel Board is working with GSA to resolve warranty issues regarding biodiesel in GSA vehicles.
- Question - Sandra Cannon: How is the biodiesel delivered to you?
- Phil Hayman: We converted a fuel facility that was not being used into a biodiesel station. A regular diesel supplier delivers the biodiesel. The biodiesel-diesel mixture is mixed in the tanker not on the premises.

**Pilot Project: Biobased Insulation-** Michael Bednarz, DOE Weatherization Assistance Program <http://www.illinoisbiz.biz/com/lowincome/ihwap.htm> and [http://www.biobased.net/architects\\_main.asp?i=ahttp://www.healthyseal.com/](http://www.biobased.net/architects_main.asp?i=ahttp://www.healthyseal.com/)

- The DOE Weatherization Assistance Program has a project in which low income residents can improve energy efficiency in their homes while saving money on heating and electricity. The Program has identified one brand of biobased spray foam insulation that we hope to pilot.
- Alex Moore from DNR, International: DOE is planning to update its list of approved materials (typically referred to as “Appendix A”) to include the biobased foam insulation.
- Question – Bruce Webster: What is the feedstock for the biobased insulation?

- Alex Moore: Soy oil.
- Mark Decot: Biobased insulation will be featured in a zero-energy home demonstration taking place next week on July 27 in Arlington, VA. We will be going to the demonstration in a biodiesel powered bus.

### **Open Discussion of Technical Issues**

- Suanne Pfifferling: I provided Eric Beaton (Weatherization Assistance Program) with information on biobased caulking.
- Mark Decot: There are a lot of opportunities for tie-in sales by putting together packages of products that the DOE buildings program can use. Shelley Launey and I came up with a package of products for vehicles: biobased window cleaner, lubricants, crankcase oil, degreasers, etc.
- Bruce Campbell: Are any representatives from the national labs working on biodiesel in back-up generators?
- Susan Huffnagle: NREL is working on this. There are issues with GSA voiding warranties on generators if biodiesel fuel is used. Will using biodiesel in back-up generators be a viable pilot project since they are not always in use?
- Action - Sandra Cannon: The National Park Service has posted all of their biodiesel-run equipment used in all national parks online to <http://www.nps.gov/renew/NPSBiodiesel.xls>. We are all addressing the warranty issue. We will set up a conference call for all of those with warranty problems.
- Dana Arnold: It is GSA and Federal Government policy to use B20. I do not know about back-up generators, though.
- Suanne Pfifferling: When it comes to automobiles, manufacturers do not recognize any fuel issues as being covered under the warranty, even if regular diesel is used.
- Kim Penfold: The National Biodiesel Board website has good information on warranties.
- Bruce Campbell: Is the shelf-life of biodiesel an issue? Will algae grow in back-up generators?
- Suanne Pfifferling: An additive may be available to prevent that from happening.
- Sandra Cannon: There could be a shelf-life issue after about 6 months to a year.
- Dana Arnold: The military is doing a lot of research in this area. It may be good to have a military representative on the next call to discuss the shelf-life issue.

**FY2003 Recycled Product Reporting Results + Reminder of 7 Newly Designated Recycled Products-** Don Lentzen, DOE-HQ Environmentally Preferable Purchasing Lead

- DOE purchases over \$29 million of products designated for purchase with recycled content, with the largest reported dollar volume being paper and toner cartridges (each \$7 million) and, of course, construction materials. Please pay special attention to purchasing remanufactured printer cartridges (In FY2003, DOE only purchased 68% remanufactured) and reporting construction product purchases.
- EPA has designated seven new products for purchase with recycled content: office furniture, non-pressure pipe, roofing materials, modular threshold ramps, blasting grit, rebuilt vehicle parts, and bicycle racks. We are required to start reporting on our purchase of these products May 2005.
- Question - Don Lentzen: Should we continue to ask for information on all products as to why they could not be purchased with the specified recycled content (when that is the case) or should we reduce that to only those products belonging to the DOE over \$1 million club or those products we need to report on to OMB? Please contact me offline if you have any input on this.

**Next Teleconference: October 28, 2004**

**Adjourn**

**SOURCES OF INFORMATION**

**DOE's "Environmentally Preferable Products Program" website for access to the reporting site, annual report, teleconference agenda and minutes, and sources of helpful information**

U.S. Department of Energy's RCRA 6002/Executive Order 13101 home page

<http://www.eh.doe.gov/p2/ap/default.htm>

**Environmentally Preferable Purchasing Executive Orders, Regulations, Guidelines**

Office of the Federal Environmental Executive

[www.ofee.gov](http://www.ofee.gov)

**GENERAL PRODUCT INFORMATION**

**Environmentally Preferable Products**

U.S. Environmental Protection Agency

<http://www.epa.gov/oppt/epp/database.htm>

**Alternative Fuels and Vehicles**

U.S. Department of Energy

<http://www.eere.energy.gov/vehiclesandfuels/epact/federal/>

## **Biobased Products**

U.S. Department of Agriculture

<http://www.biobased.oce.usda.gov/public/index.cfm>

## **Energy/Water Efficient Products**

Federal Energy Management Program

<http://www.eere.energy.gov/femp/technologies/eeproducts.cfm>

## **Recycled Products and Suppliers**

U.S. Environmental Protection Agency Comprehensive Procurement Guidelines

<http://www.epa.gov/epaoswer/non-hw/procure/index.htm>

## **Materials Exchange Products**

(especially chemicals, equipment, and hazardous materials) at other DOE facilities

Log on with user name (erhquser) and password (erhqdoe)

DOE Complex Wide Materials Exchange

<http://wastenot.er.doe.gov/DOEmatex/index.html>

## **SPECIFIC PRODUCT CATEGORIES**

### **Carpet**

#### **Contract Language and Standards/Guidelines**

U.S. Environmental Protection Agency

Select "carpet" at <http://yosemite.epa.gov/oppt/epstand2.nsf/Pages/Search.html?Open>

#### **Recycled Content Specifications and Suppliers**

U.S. Environmental Protection Agency

<http://www.epa.gov/epaoswer/non-hw/procure/products/carpet.htm>

#### **Suppliers**

Green Seal "Choose Green Report: Carpet"

[http://www.green seal.org/cgrs/Carpet\\_CGR.pdf](http://www.green seal.org/cgrs/Carpet_CGR.pdf)

### **Cement/Concrete**

#### **Recycled Content Specifications and Suppliers**

U.S. Environmental Protection Agency

<http://www.epa.gov/epaoswer/non-hw/procure/products/cement.htm>

### **Cleaning Products**

#### **Contract Language and Standards/Guidelines**

U.S. Environmental Protection Agency

Select "concrete" at

<http://yosemite.epa.gov/oppt/epstand2.nsf/Pages/Search.html?Open>

#### **Decision Making Wizard for**

U.S. Environmental Protection Agency

<http://www.epa.gov/opptintr/epp/cleaners/select/>

#### **Specifications and Process Used at PNNL**

Pacific Northwest National Laboratory

<http://www.pnl.gov/esp/greenguide/custodialproducts/>

**Suppliers**

Green Seal “Choose Green Report: Industrial and Institutional Cleaners”

[http://www.greenseal.org/cgrs/CGR\\_I&I\\_cleaners.pdf](http://www.greenseal.org/cgrs/CGR_I&I_cleaners.pdf)

**Construction Materials and Products**

**Contract Language**

U.S. Department of Energy

<http://www.pnl.gov/doesustainabledesign/> , see “Letters of Intent, Construction Contracts”

**Paint**

**Recycled Content Specifications and Suppliers**

U.S. Environmental Protection Agency

<http://www.epa.gov/epaoswer/non-hw/procure/products/paint.htm>

**Suppliers**

Green Seal “Choose Green Report: Architectural Paints”

[http://www.greenseal.org/cgrs/CGR\\_Paints.pdf](http://www.greenseal.org/cgrs/CGR_Paints.pdf)

**Toner Cartridges**

**Recycled Content Specifications and Suppliers**

U.S. Environmental Protection Agency

<http://www.epa.gov/epaoswer/non-hw/procure/products/toner.htm>

**Supplier Examples of Quality Remanufactured Cartridges**

Pacific Northwest National Laboratory

[http://www.pnl.gov/esp/greenguide/ap\\_toner.html](http://www.pnl.gov/esp/greenguide/ap_toner.html)