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DEPARTMENT OF AGRICULTURE

Office of Energy Policy and New Uses

7 CFR Part 2902

RIN 0503-AA26

Guidelines for Designating Biobased Products for Federal Procurement

AGENCY: Office of Energy Policy and New Uses, USDA.

ACTION: Notice of proposed rulemaking.

SUMMARY: The U.S. Department of Agriculture (USDA) is proposing to establish guidelines for designating items made from biobased products that would be afforded Federal procurement preference, as required under Section 9002 of the Farm Security and Rural Investment Act of 2002 (FSRIA).

DATES: Submit comments on or before [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may submit comments by postal mail/commercial delivery or by e-mail. If you use postal mail/commercial delivery, please send your comments to: Marvin Duncan, USDA, Office of the Chief Economist, Office of Energy Policy and New Uses, Room 361, 300 Seventh Street, SW, Washington, DC 20024. If you wish to use e-mail, go to the website <http://www.biobased.oce.usda.gov> for e-mail instructions or use the e-mail address [fb4p@oce.usda.gov](mailto:fb4p@oce.usda.gov). Please include your name and address in your message and "Proposed Guidelines" on the subject line. Persons with disabilities who require alternative means for

communication for regulatory information (braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice) and (202) 401-4133 (TDD).

FOR FURTHER INFORMATION CONTACT: Marvin Duncan by e-mail at mduncan@oce.usda.gov or by phone at (202) 401-0532.

#### SUPPLEMENTARY INFORMATION:

##### I. Authority

These guidelines are proposed under the authority of section 9002 of the Farm Security and Rural Investment Act of 2002 (FSRIA), 7 U.S.C. 8102 (referred to in this document as "section 9002").

##### II. Overview of Section 9002

Section 9002 provides for preferred procurement of biobased products by Federal agencies. Federal agencies are required to purchase biobased products, as defined in regulations to implement the statute, for all items costing over \$10,000 or when the quantities of functionally equivalent items purchased over the preceding fiscal year equaled \$10,000 or more.

Procurements by a Federal agency subject to section 6002 of the Solid Waste Disposal Act (42 U.S.C. 6962) are not subject to the requirements under section 9002 to the extent that the requirements of the two programs are inconsistent. Federal agencies must procure biobased products unless the items are not reasonably available, fail to meet applicable performance standards, or are available only at an unreasonable price.

The Office of Federal Procurement Policy (OFPP) and the USDA will work in cooperation to implement the requirements of section 9002. In this document, we are proposing to establish guidelines for Federal agencies to follow in the procurement of items designated for preferred procurement. These guidelines also address the statutory requirement that Federal

agencies have in place, within 1 year of the publication of final guidelines, a procurement program that assures items composed of biobased products will be purchased to the maximum extent practical. Those procurement programs would have to contain a biobased products preference program, an agency promotion program, and provisions for the annual review and monitoring of an agency's procurement program. USDA consulted with the Environmental Protection Agency (EPA), the General Services Administration (GSA), and the Department of Commerce National Institute of Standards and Technology (NIST) in preparing these proposed guidelines.

In designating items (generic groupings of specific products such as crankcase oils or synthetic fibers), the Secretary will consider the availability of such items and the economic and technological feasibility of using such items, including life cycle costs. Federal agencies would be required to purchase products contained within an item only after that item has been designated for preferred procurement. In addition, the Secretary would provide information to Federal agencies on the availability, relative price, performance, and environmental and public health benefits of such items and, where appropriate, would recommend the level of biobased content to be contained in the procured product. Manufacturers and vendors would be able to offer their products to Federal agencies for preferred procurement under the proposed program when their commercial products fell within the definition of an item that had been designated for preferred procurement and the biobased content of the products met the standards set forth in the guidelines.

Paragraph (h) of section 9002 provides that the Secretary, in consultation with the Administrator of the Environmental Protection Agency (EPA), shall establish a voluntary program authorizing producers of biobased products to use a "U.S.D.A. Certified Biobased

Product" label. In a subsequent rulemaking, we intend to establish that voluntary program and provide eligibility criteria and guidelines for the use of the "U.S.D.A. Certified Biobased Product" label.

Paragraph (j) of section 9002 provides funds to the Secretary to support the testing of biobased products to carry out the provisions of the section.

The legislative history of Title IX of FSRIA suggests that Congress had in mind three primary objectives that would apply to section 9002. The first objective is to improve demand for biobased products. This would have a number of salutary effects, one of which would be to increase domestic demand for many agricultural commodities that can serve as feedstocks for production of biobased products. Another important effect would be the substitution of products with a more benign or beneficial environmental impact, as compared to the use of fossil energy based products.

As a second objective, Congress wants to spur the development of value-added agricultural processing and manufacturing in rural communities. Since biobased feedstocks are largely produced in rural settings and, because of their bulk, require pre-processing or manufacturing close to where they are grown, increased dependence on biobased products appears likely to increase the amount of pre-processing and manufacturing of biobased products in rural regions of the Nation. This trend would help to create new investment, job formation, and income generation in these rural regions.

The third objective is to enhance the Nation's energy security by substituting domestically produced biobased products for fossil energy-based products derived from imported oil and natural gas. The growing dependence of the Nation on imported oil and natural gas, along with heightened concerns about political instability in some of the oil rich regions in the

world, have led the Congress to place a higher priority on domestically produced energy and biobased products.

### III. Background

In 1999, as required by section 504 of Executive Order 13101, "Greening the Government through Waste Prevention, Recycling, and Federal Acquisition," the U.S. Department of Agriculture (USDA) Biobased Products Coordination Council (now called the Biobased Products and Bioenergy Coordination Council) published a notice in the Federal Register (64 FR 44185, Aug. 13, 1999) to solicit public comments on a process for considering items for inclusion on a USDA Biobased Products List and suggested criteria for including biobased items on that list. The Council was established by the Secretary of Agriculture and is comprised of USDA representatives with commercialization, legislative, marketing, procurement, rural development, research, and other technical expertise. Others consulted regarding the listing procedures described in the August 1999 notice included the Office of the Federal Environmental Executive, NIST, EPA, the Federal Trade Commission (FTC), environmental organizations, and agricultural organizations. Also advising USDA were Federal members of the Executive Order 13101 Inter-Agency Advisory Group.

The requirements of section 9002 differ from those of Executive Order 13101. For example, the Executive Order and section 9002 use slightly different definitions of the term "biobased product." Another distinction is that the Executive Order encourages, but does not require, procurement of biobased products. Section 9002 establishes a mandatory procurement preference, with limited exceptions, for designated items. The Executive Order envisions a list of specific products to be promulgated, whereas section 9002 requires guidelines designating

"items which are or can be produced with biobased products" and recommended procurement practices for both biobased products and items containing biobased products.

Under section 9002, the term "biobased products" refers to "a product determined by the Secretary to be a commercial or industrial product (other than food or feed) that is composed, in whole or in significant part, of biological products or renewable domestic agricultural materials (including plant, animal, and marine materials) or forestry materials." The term "item" refers to a subcategory or grouping of similar products containing biobased content. An item is populated by commercial and industrial products available for purchase by Federal agencies. An example of an item (or subcategory) under the "Lubricants and functional fluids category" discussed later in this document is hydraulic, power steering, and transmission fluids. Under Executive Order 13101, the term "biobased product" was used to mean what the term "item" means under section 9002.

USDA no longer intends to promulgate a list of biobased products as envisioned in Executive Order 13101. Rather, USDA will designate items that qualify for preferred procurement as required by section 9002.

The statutorily required elements of the section 9002 guidelines further distinguish the guidelines from the Executive Order list. Despite these differences, comments received in response to the 1999 proposed procedures to implement the biobased products list were taken into consideration when preparing proposed product categories and selection criteria for these proposed guidelines.

For purposes of identifying a Federal agency in implementing section 9002, we have chosen to use the definition of "Federal agency" found in the Federal Acquisition Regulation (48

CFR 2.101), i.e., "any executive agency or any independent establishment in the legislative or judicial branch of Government (except the Senate, the House of Representatives, the Architect of the Capitol, and any activities under the Architect's direction)."

Once USDA designates an item, responsibility for complying with section 9002 rests with Federal agencies. Responsibilities and implementation strategies of USDA, Federal agencies, the Office of Federal Procurement Policy, and manufacturers and vendors, respectively, are outlined briefly below in section IV.

This program is modeled on the EPA Comprehensive Procurement Guideline for Products Containing Recovered Materials, known as the Comprehensive Procurement Guideline (CPG), 40 CFR part 247, which designates items that are or can be made with recovered materials. The CPG implements section 6002 of the Solid Waste Disposal Act (42 U.S.C. 6962), as amended by the Resource Conservation and Recovery Act of 1976 (RCRA), as amended. Executive Order 13101 also facilitated RCRA implementation. RCRA requires EPA to designate items that are or can be produced with recovered materials and to recommend practices for the procurement of designated items by procuring agencies. Executive Order 13101 directs EPA to designate the products in the CPG and to provide purchasing recommendations in Recovered Materials Advisory Notices (RMANs). Information on the CPG and the RMANs can be found on the Internet at <http://www.epa.gov/cpg>.

The legislative history of section 9002 suggests that Congress intended to use this program to speed the development of new markets for biobased products, rather than to support mature markets for products. Hence, USDA has crafted this program to focus on new market development. It is USDA's intention to exclude from this program biobased products it

concludes have mature markets. USDA proposes to use a number of filters or tests to exclude products in what it defines as mature markets. If a product falls within an excluded group of products in any one filter, it is excluded from consideration under the program to implement section 9002. To be eligible for preferred procurement under section 9002, a product must be found eligible under each of these filters or tests. In the first test, silk, cotton and wool garments, household items, and industrial or commercial products are excluded, unless made with a substantial amount of a biobased plastic product. Also excluded are wood products made from traditionally harvested forest materials.

Biobased products marketed only in regional or in single specialized markets, rather than national markets, are not considered to be in mature markets for purposes of this program. Finally, products developed, or that have made significant market penetration, more recently than 1972 also are not considered to be in mature markets for purposes of this program. The first of several oil supply and price shocks, which occurred in the United States beginning at about 1972, was an important impetus for beginning sustained serious new development of biobased alternatives for fossil based energy and other products in the United States. Hence, USDA has chosen to use 1972 as a dividing point between mature and emerging markets for this program.

#### IV. Responsibilities and Implementation Strategies under Section 9002

##### A. USDA's Responsibilities and Implementation Strategies

To carry out the requirements of section 9002, USDA will:

- § Propose guidelines, after consultation with the EPA, GSA, and NIST, for the use of Federal agencies that indicate which items are or can be produced with biobased products

and whose procurement by procuring agencies would carry out the objectives of this program;

- § Determine in the guidelines, as appropriate, the minimum level of biobased material to be contained in a designated item;
- § Propose items to be available for designation under the guidelines and explain the factors to be considered in their designation (availability, economic and technological feasibility, and life cycle costs);
- § Identify in the guidelines the information about availability, relative price, performance, and environmental and public health benefits that will be provided to Federal agencies on items designated for preferred procurement; and
- § Set forth recommended practices for the procurement of biobased products and designated items.

B. Federal Agencies' Responsibilities and Implementation Strategies

Following the issuance of final guidelines and the designation of items, Federal agencies would:

- § Give a procurement preference, with certain exceptions, to designated items with the highest percentage of biobased products practicable, consistent with the guidelines and with maintaining sufficient competition;
- § Incorporate in procurement specifications biobased item preferences consistent with the guidelines and the requirements of section 9002; and

§ Establish an agency affirmative procurement program that includes a biobased products preference program, an agency promotion program to promote the preference program, and an annual review to monitor the effectiveness of the agency's procurement program.

C. Office of Federal Procurement Policy Responsibilities and Implementation Strategies

Following the issuance of final guidelines and subsequent regulatory action to designate items eligible for preferred procurement, the OFPP would:

§ Work in cooperation with USDA to implement the biobased product procurement preference program;

§ Coordinate the biobased products procurement policy with other Federal procurement policies; and

§ Report to Congress every 2 years on the actions taken by Federal agencies in the implementation of the biobased product procurement program.

D. Manufacturers' and Vendors' Responsibilities and Implementation Strategies

Following the issuance of final guidelines and designation of items eligible for preferred procurement, firms desiring to participate in the program would:

§ Determine whether products they intend to offer for Federal agency procurement qualify under the guidelines and fall within items designated by USDA for preferred procurement;

§ Certify the percentage of biobased content in the commercial or industrial products that fall within designated items and are proposed by the manufacturer or vendor to be used in the performance of a contract; and

§ When offering biobased products from an item that has been designated by the Secretary for preferred procurement by Federal agencies, certify that the biobased products to be used in the performance of the contract will comply with the applicable specifications or other contractual requirements.

#### V. Proposed Guidelines

The proposed guidelines would be contained in a new 7 CFR part 2902, "Guidelines for Designating Biobased Products for Federal Procurement." The new part would be divided into two subparts, "Subpart A–General," and "Subpart B–Biobased Product Eligibility for Federal Preference." Subpart A would address the purpose and scope of the guidelines and their applicability, provide guidance on product availability and procurement, define terms used in the part, and address affirmative procurement programs and USDA funding for testing. Subpart B would address communicating information on qualifying biobased products and characteristics required for obtaining designated item status, and would set out the initial categories of designated items and minimum content. The proposed guidelines are discussed in detail below.

##### Proposed § 2902.1: Purpose and Scope

This section would introduce the guidelines by explaining that their purpose is to assist Federal agencies in complying with the requirements of section 9002 as they apply to the procurement of designated items. This section would also note that items designated in the guidelines are those items that are or can be produced with biobased products and whose procurement by Federal agencies will carry out the objectives of section 9002.

##### Proposed § 2902.2: Applicability to Federal Agencies and Exceptions to Procurement of Biobased Items

The procurement preference applies to all Federal agencies (as defined in this document) with respect to all procurement actions where the purchase price of the item exceeds \$10,000 or where the quantity of such items (or of functionally equivalent items) purchased during the preceding fiscal year cost a total of \$10,000 or more. Unlike the EPA program for procurement of items with recovered materials, section 9002 affords a procurement preference for biobased products only for procurement by Federal agencies. Thus, unlike RCRA (42 U.S.C. 6903(17)), the guidelines do not apply to State and local agencies using appropriated Federal funds to procure qualifying biobased items, and persons contracting with such agencies with respect to work performed under such contracts. USDA proposes to apply the \$10,000 threshold as applicable to Federal agencies as a whole, rather than to agency subgroups such as regional offices or subagencies of a larger department or agency.

As noted previously, the proposed guidelines would not apply to any procurement by any Federal agency that is subject to the regulations issued by the EPA under section 6002 of the Solid Waste Disposal Act (40 CFR part 247), to the extent that the requirements of the guidelines are inconsistent with those regulations. Further, as provided by paragraph (i) of section 9002, these guidelines do not apply to the procurement of motor vehicle fuels or electricity.

Section 9002 requires Federal agencies to purchase designated biobased items unless the agency determines the items to be procured are not readily available within a reasonable period of time, fail to meet the performance standards set out in applicable specifications or fail to meet reasonable performance standards of procuring agencies, or are available only at an unreasonable price.

Proposed § 2902.3: USDA Guidance on Item Availability and Procurement

The proposed guidelines would provide that, prior to designating items for preferred procurement under the section 9002 program, USDA would consider a number of factors. These factors are availability of the items and the economic feasibility and technological feasibility of using such items, including life cycle costs. Moreover, when designating items for preferred procurement under the program, USDA would provide the following information to Federal agencies on the items designated: availability, relative price, performance, and environmental and public health benefits of using the designated items.

In order to accomplish these requirements, USDA plans to initially rely, in part, on the information developed in a study by Concurrent Technologies Corporation (CTC) to address the statutory requirement for information on item availability. This study was conducted by CTC under a contract with the USDA Agricultural Research Service (ARS) as one of the activities undertaken by ARS in order to fulfill Executive Order 13101's requirement for the development of information on the market availability of biobased items. The CTC study can be viewed on the website <http://www.biobased.oce.usda.gov>.

Information on economic and technological feasibility of using biobased items and life cycle costs will be sought from industry. Because of the heterogeneity among commercial products with biobased content within any grouping of biobased items, and the heterogeneity of characteristics across item groupings, information will be sought on individual commercial products included within each type of item. Once this information is available on a sufficient number of such products within an item, the information will be evaluated and extrapolated to the generic item level and, if determined to be adequate to meet the requirements of section 9002, the item will be designated for preferred procurement.

Information on relative price, performance, and environmental and public health benefits that the Secretary is required to provide to Federal agencies will be gathered from manufacturers and vendors at the individual product level. This information, to be of maximum value to Federal agencies in making procurement decisions, must be considered at an individual product level.

USDA proposes to gather the above discussed information from industry using an Internet website to which manufacturers and vendors will be invited to voluntarily provide information, including availability on the commercial products with biobased content that they offer to Federal agencies. That website will provide business contact information, selected test information, and the information about the offered commercial products noted in this discussion. It will also group such information by item and indicate whether the item has been designated for preferred procurement under the section 9002 program. No items will be designated for preferred procurement until adequate information has been obtained from manufacturers and vendors to enable the Secretary to both designate the item and provide Federal agencies the required information about the item. USDA also believes that making the above noted information available on an individual commercial product basis on USDA's informational website will provide the greatest help to Federal agencies in making decisions on the purchase of biobased products.

USDA envisions the voluntary, web-based information system as the principal clearinghouse of information on manufacturer and vendor contact information, currently available products, and relevant product characteristics.

A standardized format with interactive capabilities will permit manufacturers and vendors to enter information into the website. The information is not expected to be either confidential or proprietary, but will instead be information a business firm would provide prospective purchasers. Data placed on the website will be password protected and can only be changed by the submitting manufacturer or vendor or by USDA. Moreover, password protection can extend, if necessary, to making individual product information accessible only to Federal agencies, USDA, and to the firm providing the information. USDA will ask manufacturers and vendors to annually review data provided on the website and to purge inaccurate or out-of-date information. In addition, USDA will periodically audit the information displayed and, where questions arise, contact the manufacturer or vendor to verify, correct, or remove incorrect or out-of-date information.

Federal agency procurement officials are encouraged to access the website to gather information on commercially available products within the scope of designated items, as a means of facilitating the acquisition of designated items, in furtherance of the requirements of section 9002.

After discussions with the Office of Management and Budget (OMB), USDA also has agreed to develop a model procurement policy and program for designated items to support its own procurement practices. USDA intends to work with OFPP to develop outreach and education programs, based on the USDA model procurement policy, to assist other Federal agencies in complying with the requirements of this program.

USDA seeks comments on the kinds of contact and product information that should be made available on its web-based information system, as well as comments on the appropriate components of a model procurement program for biobased items.

#### Proposed § 2902.4: Definitions

Section 2902.4 would define the terms used in the proposed guidelines. The definition of biobased product restates the statutory definition for that term in section 9001 of FSRIA. The section also defines several basic operational terms such as Secretary, BEES, ASTM International, diluent, filler, and FSRIA. The basis for many operative definitions is self-evident. The operative technical definitions reflect common industry usage. USDA is exercising its discretion in defining the remaining operational terms, most significantly biological products, Federal agency, agricultural materials, biobased content, forestry materials, and small and emerging private business enterprises.

#### Proposed § 2902.5: Preferred Procurement Program

Section 2902.5 sets out the procurement requirements or expectations that would apply to Federal agencies. In most respects, the information in this section reflects the responsibilities and implementation strategies discussed previously in this document (see section IV above). Section 2902.5(a) addresses procurement specifications and maximizing biobased content when procuring designated items. Section 2902.5(b) implements the requirement for Federal agencies to develop affirmative procurement programs. Section 2902.5(c) addresses the preference program component of the affirmative procurement programs.

Biobased content on items procured should be maximized subject to additional considerations. Section 9002(c) requires, with certain exceptions discussed above, that Federal

agencies, when making procurement decisions on items designated in the guidelines, give preference to items composed of the highest percentage of biobased products practicable, consistent with maintaining a satisfactory level of competition. These guidelines propose minimum content levels of biobased products in designated items. It is recognized that the highest percentage of biobased content may not always result in the best item for Federal agencies, since other characteristics, such as performance, may not, in all cases, be positively correlated with higher content. Therefore, Federal agencies should interpret the requirement to mean procuring items with the highest biobased content consistent with other desired attributes such as availability, price, and performance.

Performance of designated items is important. USDA believes that evidence of performance by a qualifying biobased item in its intended use will be a very important factor in Federal agencies' decisions to procure that item. In most circumstances, biobased items can be manufactured with a blend of components that enable them to meet required performance standards. In some circumstances, prior experience with product performance or observation of its widespread use elsewhere will be sufficient evidence of performance to cause Federal agencies to procure the qualifying biobased item. In most other cases, especially for new items in the marketplace or for certain users of high performance items in Federal agencies, more formal evidence of performance may be required. When Federal agencies require more formal performance related information for their procurement decision, USDA encourages these agencies to request this information from manufacturers or vendors of designated items, focusing on performance against ASTM, ISO, Federal or military specifications, or other industry performance standards.

It is also important to set minimum requirements for biobased content of items at levels which are low enough to allow items produced with biobased products to compete with fossil energy based products in performance and economics, using current technology. While the statute requires Federal agencies, when purchasing designated items, to give preference to those that have the highest percentage of biobased content, that requirement must be considered in the context of whether the product meets required performance standards for the application in which it will be used.

USDA has statutory requirements to meet in designating items for preferred procurement. Section 9002 requires USDA to designate items that are or can be made with biobased products. In making the designation, the Secretary is required to consider, at a minimum, the availability of such items and the economic and technological feasibility of using such items, including life cycle costs. In addition, section 9002 requires the Secretary to provide information on availability, relative price, performance, and environmental and public health benefits to Federal agencies. No designation of items will be made until the above noted requirements are met. Only upon publication of a final rule in the Federal Register of designation of an item for preferred procurement will manufacturers and vendors of commercial products with biobased content that fall within the item definition be able to assert preferred procurement status for those products to Federal agencies.

USDA also will utilize the data entered by manufacturers and vendors on its website, on individual commercial products with biobased content, to develop information on availability, relative price, performance, and environmental and public health benefits that can be extrapolated to the generic item, the scope of which embraces those individual commercial

products, prior to designating that item. This information will be made available to Federal agencies to satisfy the additional statutory information requirements (section 9002(e)(1)(C)) the Secretary is required to provide Federal agencies on designated items. Because the primary value of this information to Federal agencies is at the specific product level and in the ability to compare data across products within a designated item, USDA will encourage manufacturers and vendors to voluntarily post this product specific information on those products they are offering for preferred procurement.

USDA plans to rely on information from the previously discussed CTC study to determine the availability of items. USDA will evaluate information on relative price and performance of individual commercial products with biobased content, from the voluntary website, to develop the information on items and products the Secretary must consider in designating items and must make available to Federal agencies.

Information on environmental and public health benefits will be developed from voluntary information manufacturers and vendors provide on individual products. When voluntarily providing such information to USDA, this information must be based on a National Institute of Standards and Technology BEES (**B**uilding for **E**nvironmental and **E**conomic Sustainability) analytical tool analysis of the product.

No designation of an item will be made by USDA until USDA has sufficient information to reasonably meet the information requirements the Secretary must address, as specified in the statute, and to provide the required information to Federal agencies about items designated in subsequent regulations. Based on the information considered, USDA will publish regulations in

the Federal Register designating an item(s) under these guidelines. USDA will work to first designate items in categories having greatest likelihood of sale to Federal agencies.

Proposed § 2902.6: Funding for Testing

As explained above, section 9002 requires the Secretary to consider specific types of information in determining whether to designate an item under these guidelines. Also as explained above, section 9002 requires that the Secretary provide specific types of information to Federal agencies regarding designated items. As a means of obtaining some of the required information, section 9002(j) provides to the Secretary \$1 million per year for each of the fiscal years 2002 through 2007 to support the testing of biobased products to carry out the provisions of the section. Section 9002(j) further provides that the Secretary, at her discretion, may “give priority to the testing of products for which private sector firms provide cost sharing for the testing.” 7 U.S.C. 8102(j)(2)(C).

For the first few years of this program, the Secretary is exercising her discretion to test products based on the USDA assessment of the best use of these funds to designate items most expeditiously under this program. USDA will work first to designate items in categories having the greatest likelihood of sale to Federal agencies. Additionally, should USDA obtain sufficient data from manufacturers’ voluntary submissions or from other sources that very limited informational gaps exist to delay designation, USDA may target the use of these funds to fill in the limited data gaps to expedite designation of that item. USDA will enter into arrangements with entities capable of conducting tests to conduct tests of biobased content and BEES Analyses on products identified by USDA as part of the process of gathering such information on a sufficient number of products to enable USDA to extrapolate such information to the item level.

During this period, entities are welcome to propose cost-sharing for the testing of such items. However, USDA will not consider cost-sharing in deciding what products to test. Cost-sharing will be accepted to the extent consistent with USDA product testing decisions.

Once the program has achieved a critical mass of designated items, anticipated to occur within the next three years, USDA will exercise its discretion to make cost-sharing a more determinative factor in the selection of some products for testing. USDA will make some of the section 9002(j) funds available for testing of competitively-selected products for which private sector firms have offered cost sharing. USDA will make a public announcement to that effect at the time and solicit cost-sharing proposals. Paragraph 2902.7(b) sets forth how USDA proposes to exercise this discretion. USDA will consider cost-sharing proposals only for the BEES Analysis and performance testing of products. USDA does not intend to consider cost-sharing for testing to determine biobased content.

Cost sharing will be considered first for products of "small and emerging private business enterprises." If funds remain to support further testing, a second tranche of applicants could be drawn from all other producers of biobased items. Proposals will be evaluated and assigned a priority rating. Priority ratings will be based on the following criteria:

- § A maximum of 25 points will be awarded a proposal based on the market readiness.
- § A maximum of 20 points will be awarded a proposal based on the potential size of the market for that product in Federal agencies.
- § A maximum of 25 points will be awarded based on the financial need, for testing assistance, of the manufacturer or vendor.

§ A maximum of 20 points will be awarded a proposal based on the product's prospective competitiveness in the market place.

§ A maximum of 10 points will be awarded a proposal based on its likely benefit to the environment.

Projects will be funded in order of declining priority ratings (from highest to lowest) until available funds are committed. USDA could provide up to 50 percent of the cost of determining the life cycle costs and environmental and health effects using the NIST's BEES Analysis, up to a maximum of \$5,000 of assistance per product. USDA could provide up to 50 percent of cost for performance testing, up to \$100,000 of assistance per product for up to two performance tests (measures of performance) per product.

Pursuant to section 9002(j)(2)(B), USDA will enter into agreements with and provide the funds to entities that have the experience and special skills to conduct the testing. These entities will use the USDA and any private sector cost sharing funds to test the items. Products submitted in one year, but not funded for testing in that year, could be resubmitted to be considered for cost-sharing in the next year. USDA does not intend to provide financial assistance for testing to determine biobased content.

USDA seeks comments on possible methods of providing financial assistance for manufacturers and vendors for testing of individual commercial products with biobased content that are intended to qualify for preferred procurement by Federal agencies under this program.

#### Proposed § 2902.10: Communicating Information on Qualifying Biobased Products

Section 2902.10 of the proposed guidelines would provide general information applicable to the exchange of information regarding biobased products. In paragraph (a), we would

reiterate that manufacturers and vendors of designated items have the responsibility to inform Federal procurement officials of items that comply with the guidelines, including the biobased content of the product, and recommend that Federal agencies, for their part, affirmatively seek this information. This paragraph would also point out the informational website referred to in §2902.3 as a resource that can be utilized by both Federal agencies and manufacturers and vendors.

Manufacturers and vendors of biobased products that fall within an item (generic grouping) that has been designated by regulation for preferred procurement under the program are free to market those products to Federal agencies while claiming the preferred procurement status for the products under the program. Manufacturers and vendors must be able to certify to Federal agencies that their products are consistent with the definition of biobased product in section 2902.4. In addition manufacturers and vendors must be able to present third party test results that indicate the biobased products have at least the threshold amount of biobased feedstock content specified in the designating regulations for the item under which the biobased products fit.

Manufacturers and vendors must use the BEES analytical tool to provide information on life cycle costs and environmental and health benefits when asked for such information by Federal Agencies. In the case of products which are essentially the same formulation, but marketed under a variety of brand names, the manufacturers and vendors can simply refer to the underlying BEES Analysis data as the basis to demonstrate the life cycle costs, rather than conducting a BEES Analysis on each branded item. USDA is adopting the BEES Analysis method in order to establish a uniform methodology and platform for analysis of environmental

and health effects and life cycle costs; doing so will enable Federal agencies to evaluate BEES results (scores) and life cycle costs across biobased products within a designated item.

When asked for performance data by Federal agencies, manufacturers and vendors are required to use test results obtained, for the individual products they offer for preferred procurement, from testing against industry accepted performance standards, which may include a Federal or Military Specification (ASTM, ISO, Military Specifications, etc.) for the product, in the use for which it is intended. The test must be conducted by a third party in an ASTM/ISO compliant test facility.

In paragraph (d), we would remind manufacturers and vendors that any claims regarding health and environmental benefits of their products should conform to the Federal Trade Commission (FTC) Guides for the Use of Environmental Marketing Claims, 16 CFR part 260. A copy can be obtained through FTC's website: <http://www.ftc.gov/ftc/legal/htm>. As explained in 16 CFR 260.5, any party making a claim concerning a product's environmental attribute "must, at the time the claim is made, possess and rely upon a reasonable basis substantiating the claim."

Proposed § 2902.11: Characteristics Required for Obtaining Designated Item Status

Section 9002 envisions giving preference to items composed of the highest percentage of biobased products practicable. Hence, to further the purposes of section 9002, USDA believes it is important to guard against designating items for preferred procurement which contain only token amounts of biobased materials. However, for some uses of biobased products in the production of a designated item, such as in the case of biobased adhesives used in the manufacture of furniture, it is recognized that the biobased content in the finished item may be

relatively small, measured on a content basis. In these guidelines, USDA proposes that all qualifying items under this program must have at least 5 percent of its total manufactured value (measured after manufacture at the location of manufacture) made up of biobased product(s). USDA proposes that manufacturers and vendors self certify to Federal agencies that designated items meet this requirement. Moreover, manufacturers and vendors must be able to verify that certification from a third party test if asked to do so by Federal agencies or by USDA.

ASTM International is in the process of finalizing and adopting a method for determining biobased content. USDA anticipates that ASTM International will adopt a standard prior to USDA publishing its final rule. The method under consideration by ASTM International is a Radioisotope Standard Method to discriminate between "old carbon" from fossil resources and "new carbon" from renewable resources. A measurement of a product's contemporary  $^{14}\text{C}/^{12}\text{C}$  content is determined relative to a standard reference material. Thus, in paragraph (c) of proposed § 2902.11, we would identify that ASTM method as the standard to be used by manufacturers and vendors in certifying biobased content.

Further, USDA proposes that manufacturers and vendors must utilize third party ASTM/ISO compliant test facilities using that testing standard method to determine the biobased content of their products offered for preferred procurement. Federal agencies and USDA may request verification of biobased content from manufacturers and vendors for products certified to qualify for preferred procurement.

In the case of products which are essentially the same formulation, but marketed under a variety of brand names, the manufacturers and vendors can simply refer to the underlying

biobased content test data as the basis to demonstrate the biobased content, rather than conducting a biobased content test on each branded item.

USDA is proposing that biobased content be determined based on the weight of the biobased material (exclusive of water and other non-active ingredients, fillers, and diluents) divided by the total weight of the product and expressed as a percentage by weight.

Minimum biobased content requirements used in the proposed guidelines refer to the biobased portion of the product itself. For example, in a carpet using a biobased material as a carpet backing, the minimum biobased content indicated for the carpet refers only to the biobased backing. It is understood that the completed carpet, made up of several different materials, would have a lower biobased content than is specified in these guidelines for the biobased product (the carpet backing) itself. Minimum percentages used for various products in these guidelines refer to the biobased content of the product (such as carpet backing) itself, not to a finished product (the carpet) that might be fabricated using both a biobased product and other inputs, unless that is otherwise specified.

Section 2902.11 also would incorporate the filters discussed earlier in this preamble to exclude from this program those products having mature markets.

#### Proposed § 2902.12: Items and Minimum Biobased Content

The biobased products listed in the proposed guidelines would be grouped according to category, with each category consisting of one or more items; an item developed by a particular manufacturer is referred to as a product. That is, an item is made up of individual products and a category consists of items. For instance, "Lubricants and Functional Fluids" is a category.

Hydraulic fluids is an item within that category, and "ABC Hydraulic Fluid" made by the ABC Company is a product.

As noted previously, the items and the indicated biobased content of items contained within the categories discussed in this preamble are based on the study conducted in 2002 for the USDA Agricultural Research Service by CTC. The final report of the study can be viewed at the Office of Energy Policy and New Uses, Reporters Building, Room 361, 300 7th Street SW., Washington, DC 20024. To arrange for viewing, contact Marvin Duncan at 202-401-0532. USDA also has posted the study on its informational website, <http://www.biobased.oce.usda.gov>.

The items discussed below are intended to be the items that will be proposed for designation for preferred procurement by Federal agencies after the Secretary has sufficient information on availability of the items and the economic and technological feasibility of using such items, including life cycle costs. The information on availability of the items is determined from the CTC study from which the categories, items, and proposed minimum biobased content data were developed. However, items will not be designated for preferred procurement until the additional information required by section 9002 is considered by the Secretary. As items are designated for procurement preference, they would be added to § 2902.12 of the guidelines.

Comments proposing a new item should include information similar to that found in USDA's initial survey of the industry, including biobased products from which the items are derived, item characteristics, likely uses of the item, and percentage of biobased content of the items. In addition to new items proposed for inclusion in the guidelines, USDA is seeking comment on procedural issues, such as a process for proposing additional items, the review of such proposals, and what market information should be necessary to support the addition or

deletion of an item. USDA particularly seeks public comment on the proposed categories and items, and the reasonableness of the biobased content percentages, discussed below.

Proposed § 2902.12 would contain items, grouped according to category, that are or can be produced with biobased products and provide the minimum biobased content for each listed item. It is anticipated that as the biobased product industry develops, new products will enter the market. As necessary, new items will be designated. USDA intends to periodically survey the industry to learn of new products entering the marketplace and to determine new items for designation. While § 2902.12 in these proposed guidelines contains no categories or items, given that none have yet been designated for procurement preference, the following paragraphs contain a discussion of future proposed categories and minimum content levels thus far identified. USDA seeks comments on the following categories, items (subcategories), minimum content levels based on manufactured value, and the minimum biobased content levels.

#### Adhesives Category

Biobased adhesives are chemical products used to join or bond two or more other materials together. A wide range of agricultural materials can be used to make biobased adhesives, including but not limited to starch from corn, potatoes, wheat, tapioca, and other plants; casein from skimmed milk; soy protein; soybean oil; vegetable gums; gelatin; livestock derivatives; tannins from woody biomass; and marine animal derivatives.

USDA proposes to include in this category both biobased adhesives and items embodying those adhesives. Items using such adhesives include book bindings, envelopes, stamps, medical application such as tapes and alternatives to sutures, doors, windows, paper bonds, corrugated paper boxes, lumber, furniture, and more. Biobased pressure sensitive adhesives have been

developed for clear tape, duct tape, masking tape, labels, and a variety of disposable items.

Another example of biobased adhesives is soy-based products used to glue wood to form finger-jointed lumber, glulam beams, I-joists, and other engineered wood products.

#### Proposed Minimum Content – Adhesives Category

Adhesive products are to have a minimum biobased content of 70 percent by weight of the adhesive. Biobased adhesive additives may also be used to reduce the total amount of phenol-formaldehyde and isocyanate-containing adhesives used to bond plywood and other wood panels. These products and wood products made with these products are proposed to qualify when the additive is used to reduce total adhesive content of the finished product by at least 25 percent and when the minimum content of the additive is at least 70 percent biobased material. Finished products in which 90 percent of all of the adhesives used in production are biobased would be designated as biobased products.

#### Construction Materials and Composites Category

The Construction Material Subcategory (or item) includes product applications containing biobased adhesives, such as plywood and finger jointed lumber; oriented strand board, medium density fiberboard, and hardboard; engineered wood building components, e.g., laminated beams, trusses, finger jointed lumber, oriented strand lumber; moldings and trim; and decorative composites. Construction products include round wood; lumber; composites; and plastic-wood composite lumber and panels such as plywood, oriented strand board, medium density fiberboard, and hardboard that contains agricultural or wood-based materials.

The Composite Panels Subcategory (or item) is composed of nonstructural composite materials such as highly engineered blends of recycled paper products or agricultural wastes,

biobased resins, and color additives can combine to provide a composite and composite panels. Product applications include furniture, tabletops, trim, store fixtures, awards, plaques, trophies, indoors signs, and other interior or nonstructural uses. Composite panel products include panels made from straw or other agricultural residues.

Molded Reinforced Composites subcategory (or item) products, such as decorative trim, shingles, or siding, may be made from bioplastic resins used to bind inorganic fibers such as fiber glass or agricultural fibers such as kenaf. These resins may be made from a combination of biobased materials and may be reacted with petro-based chemicals to achieve functional properties.

The Insulating Foams and Films Subcategory (or item) includes biobased polyurethane made from a soybean oil polyol, poly-lactides made from cornstarch, polyesters made from vegetable oils, and other bioplastic materials. Hundreds of products can employ these materials ranging from carpet backing to foam cushions; pads for furniture; automotive seats and dashboards; molded cases and covers for appliances; telephones; computers; and rigid insulating foams used to insulate refrigerators, freezers, coolers, and appliances. Each use may have different biobased content requirements.

This item also includes bioplastic rigid and soft foam, used to produce such products as fiber and foam insulation. Starch mixtures such as aqua gels or vegetable compounds can be added to concrete mixture during setting to reduce the density of concrete, and concrete mold release agents from vegetable oils are available products.

The Mixed System Products Subcategory (or item) is composed of products where

specific component parts are designated as biobased (such as carpets and carpet squares with backing, attached pad, or face material that is biobased) but other components of the products may be from another product subcategory (item) or be non-biobased. The minimum content requirement may be applied to the biobased component rather than the complete product. An example would be the replacement of a portion of petroleum-based urethane for carpet backing with a percentage of soybean oil-based urethane.

In use, these items may include a large percentage of inert fillers and extenders which are not counted in computing total product weight. When determining the percent biobased content, calculations should be made on the weight of the component less excluded materials, and not on the weight of the total product.

Proposed Minimum Content – Construction Materials and Composites Category

The minimum biobased content requirement may be based on the weight of the biobased component rather than the complete material. USDA is providing guidance on the more prevalent products. As subsequent regulations to designate items for preferred procurement continue to evolve, more content information will be forthcoming. USDA particularly welcomes comments on adding additional subcategories to this section to more clearly define content requirements. The minimum biobased content of each item in this category must be:

Items	Minimum biobased content (%)
Construction material	85
Composite panels	70
Molded reinforced composites	10
Insulating foams and films	15
Components of mixed system products	20

## Fibers, Paper, and Packaging Category

There is a broad range of agricultural crops, forest biomass, and livestock that contributes materials to this category including non-tree sources such as bamboo, corn stover, low-grade cotton, flax, kenaf, cereal and grain straws, sugar cane bagasse, switch grass, leaves, and poultry feathers; and wood from forest thinnings, saw dust, flour, shavings, chips, grindings, and curls from trees.

Fibers from biobased sources can be used in the manufacture of product containers such as boxes, drums, and pails for the storage or shipment of food or manufactured products. Biobased fibers can also be used as bulk packaging materials for filler and protection of stored or transported goods. Natural biobased fibers are very ductile and typically do not splinter. Their properties have been compared to carbon and glass fibers for use in fiberglass composites.

Fiber composites are created when biobased fibers are blended with molten plastic in ratios of up to 70 percent fiber by weight to make furniture, toys, and other molded items.

Composite packaging materials use an emerging technology that relies on a mix of organic and inorganic materials, such as starch and limestone, and sometimes include fibers and coating materials that are also biodegradable. These materials often use starch from potatoes, corn, or other crops, and can sometimes be derived from reclaimed waste streams. Recent developments have also allowed for the development of non-rigid wrap materials and other food packaging innovations in addition to the sandwich “clamshells” made from starch and agricultural fibers.

Woven fiber products represent important uses of biobased fibers. A variety of biobased fibers can be spun or woven into items such as ropes, textiles, and yarns. For example, flax is a

traditional textile fiber used to make linen, while other fibers, such as jute, are woven to make burlap for bags and coverings.

Packaging materials can be made from waste fibers described above that, if not used in the paper making process, might be sent to a landfill.

Paperboard and packaging products, strong lightweight honeycomb panels made from recycled and agricultural fibers, illustrate another use of biobased fibers. Panel items can also be made almost entirely from cereal straw residue and used in nonstructural applications such as furniture, cabinets, store displays, door panels, moldings, and other fixtures.

Items such as pillows and comforters are made from milkweed fibers mixed with goose down to create bedding materials.

#### Proposed Minimum Content – Fibers, Paper, and Packaging Category

Like the construction category above, this item application is very large and each application may have separate content requirements. The category may require additional subcategories, or the creation of new categories; for instance tree-free paper versus tree-derived paper. In this guideline, USDA has listed a few of the more common uses and encourages comment on content requirements for a wide range of uses. To be included in the biobased fiber, paper, and packaging category, the minimum biobased content of each item must be:

Items	Minimum biobased content (%)
Fibers	90
Fibers composites	30
Composite packaging materials	30
Woven fiber products	75
Packaging materials	80
Uncoated printing and writing papers	20
Coated printing and writing papers	20
Bristols	50
Newsprint	20
Sanitary tissues	30
Paperboard and packaging products	30
Other paper products	50

### Fuel Additives Category

A variety of fuel additives can be made from agricultural and forest materials and can be used to help power vehicles, heat buildings, provide heat for steam for industrial process, and other applications. Fuel additives can be mixed or diluted with other materials or used as an additive to enhance certain properties of a fuel.

Raw material sources for these biobased liquid fuel additive items include processed products from agricultural crops such as corn; soy bean; rapeseed; canola; animal fat; wood; and crop and processing residues such as stalks, manure, used cooking oils, used wood, nonrecyclable paper and paper sludge, and hulls.

Raw material sources for solid fuel additive items include agricultural and forest materials such as wood and wood processing residues, formed wood residue; nonrecyclable papers, paper sludge, and other paper processing residues; grains, grain processing byproducts and residues; byproducts or residues from soy, cotton, and sugar processing; pelletized residues from livestock production and processing, including manures.

Ethanol is the most widely used biobased fuel additive. It is typically made by fermentation of an agricultural product or residue and can be used as an oxygenated additive and a source of octane in a formulation with other fuels. Another liquid biobased fuel additive is biodiesel. Biodiesel is defined as a mono-alkyl ester of vegetable oils or animal fats and can be used as a lubricity agent with low-sulfur conventional diesel fuel.

Biobased items that are solid fuels are typically "formed" for ease of handling into a wide variety of shapes and sizes including pellets, rolls, briquettes, and other forms. Combustible binders, which may both act as fuels or be blended with other primary fuels, allow the fuel to be formed into various shapes and sizes. Biobased and other binders, such as resins and propellants, are also used to facilitate ignition and combustion. Formed coal fines are one example of a solid fuel. Recovered coal fines can be formed into a variety of shapes and sizes, e.g., pellets and briquettes, by using a biobased binder such as proteins or sugars derived from soy or milk, or a combination binder composed of biobased materials and other chemicals. Biobased binders typically comprise only a small part of the total solid fuel and can be derived from dairy byproducts and other agricultural sources. The binder would be considered a biobased fuel additive.

As noted previously, section 9002 and these guidelines do not apply to the procurement of motor vehicle fuels or electricity.

Proposed Minimum Content – Fuel Additives Category

To be included in this fuel additives category, the minimum biobased content of each item must be:

Items	Minimum biobased content (%)
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Solid fuels	5
Liquid fuel additives	80

### Landscaping Materials, Compost, and Fertilizer Category

This category includes materials and items associated with landscaping materials and compost. Many biobased items, such as construction materials, coatings, paper, fibers, and sorbents are compostable and reusable as landscaping materials.

Various agricultural crops and residues, including straws and short rotation woody crops, are the sources of landscaping materials. For the purposes of this category, woody materials are those obtained from activities such as forest thinning, fuel reduction in plantation stands, regenerated forest stands, intensively cultivated short rotation woody stands (i.e., less than 10 years old), or from wood residue or recovered wood products.

Compost is derived from a managed process that decomposes and transforms organic material into a soil-like item called humus. Food scraps, leaves, paper, wood, livestock manures, and agricultural residues are organic materials that can be composted. Composting reduces the amount of waste that may go to a landfill and it produces a soil amendment that can improve the texture and fertility of the soil. Mulches and composted materials can be used to control moisture and nutrients in soils and reduce the potential for erosion. Other materials, such as agricultural and animal wastes, serve as fertilizers.

Items include landscaping materials such as bark, chips, mulch, and pine needles. Composted materials provide fertilizer and ground cover. These materials may also be coated with biobased materials to provide color, retard biodegradation, or reduce loss from wind or water erosion.

Agricultural and animal wastes are fertilizers and may be in composted form or, in the case of manures, may be applied as fertilizers without further composting or processing.

Proposed Minimum Content – Landscaping Materials, Compost, and Fertilizer Category

To be included in the landscaping materials and compost category, the minimum biobased content of each item must be:

Items	Minimum biobased content (%)
Landscaping materials	100
Compost	100
Fertilizer	80

Lubricants and Functional Fluids Category

Biobased lubricants and functional fluids are important materials used to reduce friction between moving surfaces or between moving and stationary surfaces in engines and other machinery, to reduce wear and dissipate heat on those surfaces, and to provide other benefits such as corrosion protection. Items like 2-cycle engine oils can be formulated from biobased sources. These formulated lubricants are added to fuels used in 2-cycle engines found in lawnmowers, chainsaws, string trimmers, and other small machinery.

Biobased functional fluids are used as items that transfer heat and/or pressure to or from surfaces, reduce friction in machining operations, provide electrical insulation, and for many other purposes. There is a broad range of biobased lubricant and functional fluid items, each carefully designed to meet particular performance needs and applications. These materials often need to be replaced on a routine schedule to maintain their expected performance.

Biobased lubricants and functional fluids are typically made from multiple components, including one or more base stocks plus additives that enhance performance or extend the life of

the item. A variety of agricultural-based oils can be used as biobased lubricants and functional fluids, including but not limited to canola, corn, rapeseed, soybean, sunflower, other plant materials, and animal fats. The base oil used must have sufficient natural or enhanced stability to be used as base stock for biobased lubricants. Biobased items in this category can be base stock (the starting material into which additives and other materials are blended to make the final formulated product), lubricant or functional fluid additive (materials that are used for specific performance benefits such as lower pour point, increased flash point, greater extreme pressure properties, a desired viscosity, or reduced foam), or formulated lubricant or functional fluid (the final product including base stock and all additives).

Vehicles, heavy machinery, and mobile equipment use lubricant items such as crankcase oils and greases, and functional fluids such as transmission fluids, coolants, power steering fluids, brake fluids, and others. Industrial equipment uses for lubricants include metal working fluids (cutting and drilling oils/lubricants, stamping and forming lubricants), hydraulic fluids, and process fluids (heat transfer and dielectric fluids). Total loss lubricants are released directly into the environment in such applications as rail and flange, wire rope, and chain saw lubricants; concrete and asphalt form release fluids; and 2-cycle engine oils.

Biobased lubricants can include bar, chain, and sprocket oils or general purpose lubricants used for general cleaning, lubrication, and corrosion prevention of metal parts including wheels, bearings, gears, rollers, chains, hinges, hand tools, guns, and sporting equipment.

Biobased hydraulic fluid items can be used in construction equipment, industrial pumps, and other equipment, as well as in specialty uses where incidental food contact may occur.

These specialty fluids can also be used in transmission systems of vehicles and other transportation equipment.

Biobased functional fluid items include the fluids used to lubricate and cool equipment/metals and nonmetal parts during cutting and parts fabrication, as well as drilling and machining operations.

Biobased functional fluids can be used for specialty purposes items such as mold release agents that are applied to wood, metal, or plastic forms prior to pouring concrete to facilitate the removal of forms after concrete has cured, or to foundry molds prior to pouring the foundry metal to facilitate the removal of metal parts from the molds. These biobased items can also be used as dielectric fluids that are used in electric transformers to provide insulation and to dissipate heat generated by the transmission of electric current.

Proposed Minimum Content – Lubricants and Functional Fluids Category

To be included in this lubricants and functional fluids category, the minimum biobased content of each item must be:

Items	Minimum biobased content (%)
Crankcase oils (water cooled engines)	10
Crankcase oils (air cooled engines)	50
2-cycle engine oils	50
Fifth-wheel grease	40
Automotive and other metal complex grease	25
Total loss lubricants (wire rope, bar-chain, etc.)	50
Turbine and other industrial lubricants	50
Penetrating oils	50
General purpose and other	90
Hydraulic, power steering, transmission fluids	50
Brake fluids	20
Cutting, drilling, and tapping oils (neat use)	50
Metal working concentrates (for dilution)	30

Forming pastes and extreme pressure stamping	30
Concrete and asphalt release	70
Metal foundry and mold release	50
Transformer oil and dielectric fluids	70

### Plastics Category

Most plastics are made from petroleum-based monomers and polymers. Biobased plastics from renewable resources are sometimes biodegradable and have positive life-cycle benefits. Biobased plastics can be derived from a wide variety of agricultural and forest materials in the form of starch, cellulose, and other polymers or synthesized from plant oil and process byproduct monomers.

Biobased plastic polymers include cellulose, the most plentiful carbohydrate since 40 percent of all organic matter in the world is cellulose; starch, found in corn, potatoes, wheat, tapioca, and other plants can be used for such nonfood items as paper, cardboard, textile sizing, and adhesives; collagen, the most abundant protein found in mammals, including gelatin used to make sausage casings, capsules for drugs and vitamin preparations, and other miscellaneous industrial applications, including photography; and casein, a commercial product derived mainly from milk, used in adhesives, binders, protective coatings, and other biobased items. Corn, soy, and wheat proteins are abundant and can be used to make adhesives and coatings for paper and cardboard. Polyesters are produced by bacteria through fermentation processes and are used in biomedical applications.

The plastic materials made with biobased monomers, such as plant oils, propane diol, and lactic acid, can be made to closely resemble the molecular structures of petroleum-based plastics and provide particular performance and application benefits, e.g., thermoplastic or thermoset

characteristics, pressure sensitivity, elastomeric, or other characteristics. When used for disposable items such as food packaging, the biobased plastic packaging can be fully compostable.

Used in durable goods for insulation and cushioning, biobased plastics may be rigid for panels in appliances, flexible in cushions, or molded for automotive dashboards, for example. Examples of biodegradable plastic films are biofilms, plastic films made biodegradable by formulation with starch. Examples of durable films and coatings are components in durable goods such as automotive and construction equipment, tools, electrical equipment, and appliances. Water-soluble polymers are biobased items used in wastewater facilities and can help mining and heavy industry clean heavy metals from their wastewater. Examples of biodegradable/compostable molded plastic items are table flat ware, knives, forks, and spoons. Examples of durable molded plastic items and composites using biobased resins are thermoset automotive parts and equipment hoods and doors and access panels for farm and industrial equipment. Examples of molded composite items using biobased fibers are automotive parts combining petroleum-based resins with natural fibers, such as interior door panels and trunk liners. Examples of synthetic fibers from biobased raw materials are synthetic fibers, similar in function to nylon, woven into various textiles such as carpeting.

Proposed Minimum Content – Plastics Category

To be included in this bioplastics and biopolymers category, the minimum biobased content of each item must be:

Items	Minimum biobased content (%)
Biodegradable foams	50
Durable foams	15

Biodegradable films	25
Durable films and coatings	20
Water soluble polymers	50
Compostable molded products	75
Molded plastics and composites/biobased resins	10
Molded composites/biobased fibers	20
Synthetic fibers	50

### Paints and Coatings Category

Paints and other types of coatings such as stains, varnishes, and sealants can be derived from agricultural materials. These coatings enhance the appearance and protect the materials onto which they are applied. The protective function includes reducing corrosion, water infiltration, weathering from sun and wind exposure, and other damage. Biobased paints and coatings are important alternatives to traditional paints and coatings that are derived from petroleum-based chemicals and metal pigments.

A wide variety of agricultural materials can be used to produce items for biobased paint and coatings applications, including: xanthan gum to help thicken latex paints and coatings, and to uniformly suspend zinc, copper, and other metal additives in corrosion control coatings; cellulose esters and ethers can be used to make lacquers and paints; guayule derived epoxy-amine can be used to make coatings for metal panels that help protect the metal from corrosion during exposure to fog and salt; corn, soy, wheat, and other proteins are used to make coatings for paper and cardboard; and epoxidized linseed oil and soybean oil can be used as plasticizers, as well as intermediate chemicals in the manufacture of paints.

Biobased paints and coatings have a wide range of item uses that include protection of seeds to enhance germination, marine coatings, concrete and wood sealers, stains, corrosion

inhibitors, and polishes. Architectural coatings made from soybean and linseed oils constitute a significant portion of the coatings market. Industrial coatings made from vegetable oils have been the mainstay in architectural and industrial paints for corrosion prevention, weatherability, and ease of application.

Proposed Minimum Content – Paints and Coatings Category

To be included in the paints and coatings category, the minimum biobased content of each item must be:

Items	Minimum biobased content (%)
Formulated product	20

Solvents and Cleaners Category

Biobased solvents and cleaners are widely used as cleaners and de-greasers in manufacturing and other processes and as ingredients in adhesives, paints, and coatings. Solvent and cleaner applications are broad and include alternatives to petroleum chemicals such as mineral spirits, ketones, acetone, trichloroethylene, xylene, toluene, and methylene chloride. As a cleaning item, uses include fabric and textile cleaning; fruit and vegetable cleaning; removal of grease, tar, oil, stains, paints from concrete and metal surfaces; paint stripper from metals and wood; carpet and upholstery cleaner; solvent for inks, paints; agricultural chemicals such as fertilizers, herbicides and pesticides; graffiti remover; and industrial parts cleaning. Some biobased solvents may also be used as carrier solvents for paints, inks, lotions, insect repellents, polishes, and other uses.

Biobased solvents and cleaners are made from renewable agricultural materials including crops and livestock.

Diluent items made from soybean oil, linseed oil, and tung oil can reduce the viscosity of a paint or coating. These diluents can act as both a solvent and a resin, thus eliminating the need for volatile organic compounds (VOCs). These solvents can be used in a variety of specialty applications such as metal finishing and ink formulation.

Parts cleaning compounds can contain one or more biobased solvents that are formulated with other performance additives such as surfactants, biocides, and rheology agents. These items are used in manufacturing and fabrication operations for cleaning parts prior to assembly, or in repair operations such as automotive shops or jet aircraft engine repair. Printing ink removers can be formulated items used for the removal of ink from printing presses and other printing equipment, such as press and blanket washes and screen cleaners. Adhesive/mastic removers are generally formulated items designed to remove adhesives or mastics from machinery used in gluing applications or from surfaces where an adhesive or mastic has been applied, such as with tile removal. Paint strippers are generally formulated items designed to remove paints from wood or metal surfaces. Asphalt removal and release materials are formulated or neat solvent items used to remove built up asphalt from machinery, or they can be used as a pre-spray for dump trucks to prevent sticking of asphalt to truck beds.

Hard surface cleaners include general purpose formulated items for the removal of greases and other dirt from metal, tile, glass, plastics, and hard surfaces. Glass cleaners are generally formulated items for the removal of dirt from glass surfaces with minimal or no film residues. Food machinery cleaners are formulated items used to remove accumulated greases and soils from metal and non-metal parts of food machinery (meat saws and slicers, vent fans, ovens, cooking vats, etc.), and should be approved for incidental food contact or certified by the

manufacturer as safe. Textile cleaners are formulated items for the removal of heavy stains from textiles prior to institutional cleaning (dry cleaning or laundry). Graffiti removers are formulated items for the removal of graffiti (spray paint, markers, crayons, etc.) from metal and or wood surfaces. Concrete, stone, and masonry cleaners are formulated items that remove oil, grease, soot, and other soils from concrete driveways/sidewalks, stone, and masonry.

Hand cleaners and soaps are formulated items for the removal of heavy greases and dirt from skin. Laundry aids include stain removers and pre-washes for the treatment of stains on fabrics. Wood cleaners and polishes are formulated items for cleaning and polishing of wood surfaces and furniture.

Some biobased solvents are used as carrier solvents for paints, inks, lotions, insect repellents, polishes, and other uses.

Proposed Minimum Content – Solvents and Cleaners Category

To be included in this solvents and cleaners category, the minimum biobased content of each item must be:

Items	Minimum biobased content (%)
Formulated product	50
Neat product (concentrate)	100

Sorbents Category

Biobased sorbents are materials that are used to take up and hold liquids. A wide range of agricultural and forest materials can be used as biobased sorbents, including but not limited to wool, cotton and cotton linters, vegetable starch, kenaf, and agricultural residues such as corn stover and peanut hulls. The range of items produced includes products to collect oil and other

environmental spills, collect blood and other fluids in medicinal and surgical applications, collect urine in diapers and incontinence products, and for animal bedding (including wood chips).

Sorbents can be placed in items such as containers, packages, gauzes, or other carriers to create a sorbent system. This aids in handling of the sorbent and application of the sorbent at a location to achieve greatest benefit. The sorbent carrier may be of a material other than a biobased item. For the purposes of this category, the biobased material is the "active" part of the sorbent system. Biobased items in this category must address the function of the entire product, e.g., the sorbent itself as well as the casing or framework holding or enclosing the sorbent.

Plant starch contained within a cotton bag is an illustration of a sorbent system. While the plant starch is not the end product, it is the "active" ingredient in these sorbent systems. The USDA Agricultural Research Service developed a patented sorbent gel that would be a sorbent system. The gel is capable of absorbing hundreds of times its own weight in water and has been used in such items as seed coatings, wound dressings, automobile fuel filters, plastic barriers used at construction sites, and, most notably, in disposable diapers.

#### Proposed Minimum Content – Sorbents Category

The biobased sorbents product category is organized as two broad groups of items: sorbents and sorbent systems. A sorbent system involves the use of a sorbent (active ingredient) in combination with a non-active carrier or an active carrier. For example a disposable diaper is a carrier for a specialized absorbent material, which is the sorbent. To be included in the sorbents category, the minimum biobased content of each item must be:

Items	Minimum biobased content (%)
Sorbents	90
Sorbent systems	75

### Plant and Vegetable Inks Category

Here the category and the item are one and the same. Plant and vegetable oils can be used to make a wide variety of biobased inks. Over 90 percent of all U.S. daily newspapers use at least some soy ink, made by blending soybean oil with pigments, resins, and waxes to make either black or color ink. Unlike petroleum inks, soy ink does not release VOCs into the atmosphere upon drying. Newspapers printed with soy ink are easier to recycle.

In 1994, the U.S. Congress enacted the "Vegetable Ink Printing Act of 1994," Public Law 103-348, mandating that, when technologically feasible and price competitive, Federal lithographic printing be performed using ink containing minimum percentages of plant and vegetable oil. Plant and vegetable inks are not considered to be in mature markets because plant and vegetable inks did not have significant national market penetration prior to 1972.

Biobased inks can be provided in black and a variety of colors. These inks can be used to print a broad range of documents, including newspapers, magazines, brochures, business cards, and reports. The inks can also be used with a variety of specialty applications including stencils, textiles, labeling, as well as pens and other writing instruments.

### Proposed Minimum Content – Plant and Vegetable Inks Category

To be included in the inks category, the minimum biobased content of each item must be:

Items by application	Minimum biobased content (%)
News inks – black	40
News inks – color	30
Sheet-fed inks	20
Forms inks	20
Heat-set inks	10
Specialty inks	20

## VI. Plan for Future Development of Voluntary Labeling Program

Section 9002(h) directs USDA to establish a voluntary labeling program for biobased items. USDA will address requirements for the labeling program in a future rulemaking. However, in order to signal USDA thinking in this regard, the potential parameters of the labeling program are described here.

It is anticipated the labeling program will build on the requirements to qualify for preferred procurement of biobased items discussed in this current proposed regulation. Biobased products that qualify for preferred procurement would be eligible to qualify for use of the "U.S.D.A. Certified Biobased Product" label. Two additional criteria would determine eligibility to use the label. First, an analysis of life cycle costs and health benefits of the product would be required using NIST's BEES (**B**uilding for **E**nvironmental and **E**conomic Sustainability) analytical tool. This analysis would be conducted by NIST or by a third party authorized by NIST to conduct the BEES Analysis. Second, the product would have passed one or more tests against applicable ASTM, International Organization for Standardization (an international standards setting organization identified by the acronym ISO), Federal or military specifications, or industry performance standards by a third party ASTM/ISO compliant testing facility, and results of those tests would be available to Federal procurement officials.

USDA seeks comments on the potential direction of future regulation regarding a voluntary program for use of the label by manufacturers and vendors of biobased products and on the possibility of assessing a user fee to support the labeling program.

## VII. Regulatory Information

A. Executive Order 12866, Regulatory Planning and Review

It is estimated the proposed rule, when finalized, will not have an annual effect on the economy of \$100 million or more. This program will have only a relatively small effect on the economy for the foreseeable future. This rule does not propose to designate any items.

Successive items will be designated for preferred procurement through subsequent rulemakings over a period of at least several years. The industry, itself, is still very small. Although this program is intended to spur development of the industry, that is likely to occur only over many years. Each time an item is proposed for designation, USDA will evaluate the economic effect of that designation, as well as the cumulative effect of that and previous item designations.

For the above reasons, this rule has been determined to be not significant for purposes of Executive Order 12866 and, therefore, has not been reviewed by the Office of Management and Budget.

B. Regulatory Flexibility Act

When an agency issues a rulemaking proposal, the Regulatory Flexibility Act (RFA), 5 U.S.C. 601-612, requires the agency to “prepare and make available for public comment an initial regulatory flexibility analysis” which will “describe the impact of the proposed rule on small entities.” 5 U.S.C. 603(a). Section 605 of the RFA allows an agency to certify a rule, in lieu of preparing an analysis, if the proposed rulemaking is not expected to have a significant economic impact on a substantial number of small entities.

Although this program ultimately may have a direct impact on a substantial number of small entities, USDA has determined that this proposed rule will not have a direct significant economic impact on a substantial number of small entities. This rule will affect directly primarily Federal agencies. Private sector manufacturers and vendors of biobased products voluntarily may provide information to USDA through the means set forth in this proposed rule. However, the proposed rule imposes no requirement on manufacturers and vendors to do so, and does not differentiate between manufacturers and vendors based on size. USDA does not know how many small manufacturers and vendors may opt to participate at this stage of the program.

As explained above, when USDA issues a proposed rulemaking to designate items for preferred procurement under this program, USDA will assess the anticipated impact of such designations, including the impact on small entities. USDA anticipates that this program will impact small entities which manufacture or sell biobased products. For example, once items are designated, this program will provide additional opportunities for small businesses to manufacture and sell biobased products to Federal agencies. This program also will impact indirectly small entities that supply biobased materials to manufacturers. Additionally, this program may decrease opportunities for small businesses that manufacture or sell nonbiobased products or provide components for the manufacturing of such products. Again, USDA cannot assess these anticipated impacts on small entities until USDA proposes items for designation. This rule does not propose to designate any items.

The proposed rule will directly impact small entities by implementing a cost-sharing program which gives first consideration to proposals for products of “small and emerging business enterprises.” Submission of a proposal is voluntarily and not limited to small entities. The direct impact would be beneficial for those entities whose products are selected for cost-sharing. Because of the limited amount of funds available for cost-sharing, the proposed ceilings on cost-sharing, and the anticipated breadth of any competition (not limited to a particular manufacturing sector and open to other than small entities), USDA does not anticipate that this cost-sharing competition would have a significant economic impact on a substantial number of small entities.

Accordingly, USDA hereby certifies that this proposed rule will not have a significant economic impact on a substantial number of small entities. USDA invites comments from members of the public who believe that the proposed rule will have a significant economic impact on a substantial number of small entities.

C. Executive Order 12630

This rule has been reviewed in accordance with Executive Order 12630, Governmental Actions and Interference with Constitutionally Protected Property Rights, and does not contain policies that would have implications for these rights.

D. Executive Order 12988

This proposed rule has been reviewed in accordance with Executive Order 12988, Civil Justice Reform. This proposed rule does not preempt State or local laws, is not intended to have retroactive effect, and does not involve administrative appeals.

E. Executive Order 13132

This proposed rule does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment. Provisions of this proposed rule will not have a substantial direct effect on States or their political subdivisions or on the distribution of power and responsibilities among the various government levels.

F. Unfunded Mandates Reform Act of 1995

This proposed rule contains no Federal mandates under the regulatory provisions of Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), 2 U.S.C. 1531-1538, for State, local, and tribal governments, or the private sector. Therefore, a statement under section 202 of UMRA is not required.

G. Executive Order 12372

For the reasons set forth in the Final Rule Related Notice for 7 CFR part 3015, subpart V (48 FR 29115, June 24, 1983), this program is excluded from the scope of the Executive Order 12372 which requires intergovernmental consultation with State and local officials. This program does not directly affect State and local governments.

H. Executive Order 13175

The policies contained in this rulemaking do not have tribal implications and thus no further action is required under Executive Order 13175.

I. Paperwork Reduction Act

In accordance with the Paperwork Reduction Act of 1995, 44 U.S.C. chapter 35, and the implementing Office of Management and Budget (OMB) regulations in 5 CFR part 1320, USDA has submitted the information collections contained in this proposed rule to the OMB for review under section 3507(d) of the Act. Comments addressing the proposed information collections

should be submitted to the Office of Information and Regulatory Affairs of OMB, Attention: Desk Officer for Agriculture, Margaret Malanoski, 725 17<sup>th</sup> Street, NW, Room 10202, Washington, DC 20503.

Title: Guidelines for Designating Biobased Products for Federal Procurement

Abstract: USDA will collect information from biobased product manufacturers and vendors on a voluntary basis to support a website maintained by USDA for the use of those parties, as well as the use of Federal agencies and the public. Information to be requested will include identification of products offered for preferred procurement within a designated item, contact information for the manufacturer or vendor, and demographic information about the manufacturer or vendor that will assist Federal agencies in reporting on the performance of the preferred procurement program. In addition, information will be sought regarding availability of products within an item considered for designation; relative prices of the products; performance of the products against industry standards such as ASTM, ISO, Federal or military specifications, or other standards; and environmental and public health benefits using NIST's BEES analytical tool.

This information may be included on the website or a hotlink may be established to manufacturers' or vendors' websites to access the information. The information sought for this voluntary website is envisioned to be non-proprietary. Should proprietary information be provided, the website will be password protected making that accessible only to USDA, Federal agencies, and to the manufacturer or vendor that provided the information.

Estimate of respondent burden: Public reporting burden for the collection of information is estimated to average 50 hours per product. Reporting is voluntary on the part of manufacturers/vendors of biobased products.

Respondents: Biobased product manufacturers and vendors.

Estimated annual number of respondents: 200.

Estimated number of responses per respondent: 1.

Estimated total annual burden hours on respondents: 10,000.

USDA invites written comments on:

- (a) Whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility;
- (b) The accuracy of the agency's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used;
- (c) Ways to enhance the quality, utility, and clarity of the information to be collected; and
- (d) Minimizing the burden of the collection of the information on those who are to respond, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology.

List of Subjects in 7 CFR Part 2902

Biobased Products, Procurement.

For the reasons stated in the preamble, the Department of Agriculture proposes to amend 7 CFR chapter XXIX as follows:

Chapter XXIX – Office of Energy Policy and New Uses, U.S. Department of Agriculture

1. The chapter heading of chapter XXIX is revised to read as set forth above.
2. A new part 2902 is added to Chapter XXIX to read as follows:

PART 2902–GUIDELINES FOR DESIGNATING BIOBASED PRODUCTS FOR FEDERAL  
PROCUREMENT

Subpart A–General

Sec.

2902.1 Purpose and scope.

2902.2 Applicability.

2902.3 USDA guidance on item availability and procurement.

2902.4 Definitions.

2902.5 Preferred procurement program.

2902.6 Funding for testing.

Subpart B–Biobased Product Eligibility for Federal Preference

Sec.

2902.10 Communicating information on qualifying biobased products.

2902.11 Characteristics required for obtaining designated item status.

2902.12 Items and minimum biobased content.

Authority: 7 U.S.C. 8102.

Subpart A–General

§ 2902.1 Purpose and scope.

(a) The purpose of the guidelines in this part is to assist Federal agencies in complying with the requirements of section 9002 of FSRIA, 7 U.S.C. 8102, as they apply to the procurement of the items designated in subpart B of this part.

(b) The guidelines in this part designate items that are or can be produced with biobased products and whose procurement by Federal agencies will carry out the objectives of section 9002 of FSRIA.

§ 2902.2 Applicability.

(a) The guidelines in this part apply to all procurement actions by Federal agencies involving items designated by USDA in this part, where the Federal agency purchases \$10,000 or more worth of one of these items during the course of a fiscal year, or where the quantity of such items or of functionally equivalent items purchased during the preceding fiscal year was \$10,000 or more. The \$10,000 threshold applies to procuring agencies as a whole rather than to agency subgroups such as regional offices or subagencies of a larger department or agency.

(b) The guidelines in this part do not apply to:

(1) Any procurement by any Federal agency that is subject to regulations of the Administrator of the Environmental Protection Agency under section 6002 of the Solid Waste Disposal Act (40 CFR part 247), to the extent that the requirements of this part are inconsistent with such regulations; or

(2) The procurement of motor vehicle fuels or electricity.

(c) FSRIA section 9002(c)(1) requires Federal agencies to procure designated items composed of the highest percentage of biobased products practicable, consistent with maintaining a satisfactory level of competition, considering such guidelines. Federal agencies

may decide not to procure such items if they are not reasonably priced or readily available or do not meet specified or reasonable performance standards.

§ 2902.3 USDA guidance on item availability and procurement.

An informational USDA website implementing section 9002 can be found at:

<http://www.biobased.oce.usda.gov>. USDA will maintain a voluntary web-based information site for manufacturers and vendors of designated items produced with biobased products and Federal agencies. Through this website, USDA intends to provide information as to the availability, relative price, performance and environmental and public health benefits of the designated items. USDA encourages manufacturers and vendors to provide product, business contacts, and product information for designated items. USDA also encourages Federal agencies to utilize this website to obtain current information on designated items, contact information on manufacturers and vendors, and access to information on product characteristics relevant to procurement decisions.

§ 2902.4 Definitions.

These definitions apply to this part:

Agricultural materials. Agricultural-based, including plant, animal, and marine materials, raw materials or residues used in the manufacture of commercial or industrial, nonfood/nonfeed products.

ASTM International. ASTM International, a nonprofit organization organized in 1898, is one of the largest voluntary standards development organizations in the world with about 30,000 members in over 100 different countries. ASTM provides a forum for the development and publication of voluntary consensus standards for materials, products, systems, and services.

BEES. An acronym for "**B**uilding for **E**nvironmental and **E**conomic **S**ustainability," an analytic tool used to determine the environmental and health benefits and life cycle costs of items, developed by the U.S. Department of Commerce's National Institute of Standards and Technology, with support from the U. S. Environmental Protection Agency, Office of Pollution Prevention and Toxics (*BEES 3.0, Building for Environmental and Economic Sustainability Technical Manual and User Guide*, NISTIR 6916, National Institute of Standards and Technology, U.S. Department of Commerce, October 2002). Also, see [http://www.bfrl.nist.gov/oa/software/bees\\_USDA.html](http://www.bfrl.nist.gov/oa/software/bees_USDA.html) for a discussion of how biobased feedstocks are addressed in the BEES Analysis.

Biobased components. Any intermediary materials or parts that, in combination with other components, are functional parts of the biobased product.

Biobased content. The weight (or volume, where appropriate) of the biobased material in the product divided by the total weight (or volume, where appropriate) of the product, times 100 to yield the percent of biobased content. Total product weight may be calculated exclusive of water or other inactive ingredients, fillers and diluents.

Biobased product. A product determined by the Secretary to be a commercial or industrial product (other than food or feed) that is composed, in whole or in significant part, of biological products or renewable domestic agricultural materials (including plant, animal, and marine materials) or forestry and materials.

Biological products. Products derived from living materials other than agricultural or forestry materials.

Designated item. A category of products identified in § 2902.12 that is eligible for the procurement preference established under section 9002 of FSRIA.

Diluent. A substance used to diminish the strength, scent, or other basic property of a substance.

Engineered wood products. Products produced with a combination of wood, food fibers and adhesives.

Federal agency. Any executive agency or independent establishment in the legislative or judicial branch of the Government (except the Senate, the House of Representatives, the Architect of the Capitol, and any activities under the Architect's direction).

Filler. A substance added to a product to increase the bulk, weight, viscosity, strength, or other property.

Forest thinnings. The removal of trees from a dense forest, primarily to improve growth, enhance forest health, or recover potential mortality. To recover potential mortality means to remove trees that are going to die in the near future.

Forestry materials. Materials derived from the practice of planting and caring for forests and the management of growing timber. Such materials must come from short rotation woody crops (less than 10 years old), sustainably managed forests, wood residues, or forest thinnings.

Formulated product. A product that is prepared or mixed with other ingredients, according to a specified formula and includes more than one ingredient.

FSRIA. The Farm Security and Rural Investment Act of 2002, Pub. Law 107-171.

Ingredient. A component; part of a compound or mixture; may be active or inactive.

ISO. The International Organization for Standardization, a network of national standards institutes from 145 countries working in partnership with international organizations, governments, industries, business, and consumer representatives.

Neat product. A product that is made of only one ingredient and is not diluted or mixed with other substances.

Relative price. The price of a product as compared to the price of other products on the market that have similar performance characteristics.

Residues. That which remains after a part is taken, separated, removed, or designated; a remnant; a remainder; and, for this purpose, is from agricultural materials, biological products, or forestry materials.

Secretary. The Secretary of the United States Department of Agriculture.

Small and emerging private business enterprise. Any private business that employs 50 or fewer employees and has less than \$1 million in projected annual gross revenues.

Sustainably managed forests. Practice of a land stewardship ethic that integrates the reforestation, management, growing, nurturing, and harvesting of trees for useful products while conserving soil and improving air and water quality, wildlife, fish habitat, and aesthetics.

§ 2902.5 Preferred procurement program.

(a) Within 1 year after the publication date of each designated item, Federal agencies that have the responsibility for drafting or reviewing specifications for items procured by Federal agencies shall ensure that their specifications require the use of designated items composed of biobased products, consistent with the guidelines in this part. The biobased content of a designated item may vary considerably from product to product based on the mix of ingredients

used in its manufacture. In procuring designated items, the percentage of biobased content should be maximized, consistent with achieving the desired performance for the product.

(b) Within 1 year after the publication date of the guidelines in this part, each Federal agency shall develop a procurement program which will assure that items composed of biobased products will be purchased to the maximum extent practicable and which is consistent with applicable provisions of Federal procurement laws. Each procurement program shall contain:

- (1) A preference program for purchasing designated items,
- (2) A promotion program to promote the preference program; and
- (3) Provisions for the annual review and monitoring of the effectiveness of the procurement program.

(c) In developing the preference program, Federal agencies shall adopt one of the following options, or a substantially equivalent alternative, as part of the procurement program:

(1) A policy of awarding contracts to the vendor offering a designated item composed of the highest percentage of biobased product practicable except when such items:

- (i) Are not available within a reasonable time;
- (ii) Fail to meet performance standards set forth in the applicable specifications, or the reasonable performance standards of the Federal agency; or
- (iii) Are available only at an unreasonable price.

(2) A policy of setting minimum biobased products content specifications in such a way as to assure that the biobased products content required is consistent with section 9002 of FSRIA and the requirements of the guidelines in this part, except when such items:

- (i) Are not available within a reasonable time;

(ii) Fail to meet performance standards for the use to which they will be put, or the reasonable performance standards of the Federal agency; or

(iii) Are available only at an unreasonable price.

§ 2902.6 Funding for testing.

(a) USDA will use funds to support testing for biobased content and conduct of the BEES Analysis for products within items USDA has selected to designate for preferred procurement through early regulatory action. USDA initially will focus on gathering the necessary test information on a sufficient number of products within an item (generic grouping of products) to support regulations to be promulgated to designate an item or items for preferred procurement under this program. USDA may accept cost sharing for such testing to the extent consistent with USDA product testing decisions. During this period USDA will not consider cost sharing in deciding what products to test. When USDA has concluded that a critical mass of items have been designated, USDA will exercise its discretion, in accordance with the competitive procedures outlined in paragraph (b) of this section, to allocate a portion of the available USDA testing funds to give priority to testing of products for which private sector firms provide cost sharing for the testing.

(b)(1) Subject to the availability of funds and paragraph (a) of this section, USDA will announce annually the solicitation of proposals for cost-sharing for the testing of biobased products to carry out this program. Information regarding the submission of proposals for cost sharing also will be posted on the USDA informational website, <http://www.biobased.oce.usda.gov>.

(2) Cost-sharing proposals will be considered first for products of small and emerging

private business enterprises. If funds remain to support further testing, a second tranche of applicants may be drawn from all other producers of biobased items. Proposals will be evaluated and assigned a priority rating. Priority ratings will be based on the following criteria:

- (i) A maximum of 25 points will be awarded a proposal based on the market readiness;
  - (ii) A maximum of 20 points will be awarded a proposal based on the potential size of the market for that product in Federal agencies;
  - (iii) A maximum of 25 points will be awarded based on the financial need for assistance of the manufacturer or vendor;
  - (iv) A maximum of 20 points will be awarded a proposal based on the product's prospective competitiveness in the market place;
  - (v) A maximum of 10 points will be awarded a proposal based on its likely benefit to the environment.
- (3) Proposals will be selected in order of declining priority ratings (from highest to lowest) until available funds for the fiscal year are committed.
- (4)(i) For products selected for BEES Analysis testing under this paragraph, USDA could provide up to 50 percent of the cost of determining the life cycle costs and environmental and health effects using the NIST's BEES Analysis, up to a maximum of \$5,000 of assistance per product.
- (ii) For products selected for performance testing under this paragraph, USDA could provide up to 50 percent of cost for performance testing, up to \$100,000 of assistance per product for up to two performance tests (measures of performance) per product.
- (5) For selected proposals, USDA will enter into agreements with and provide the funds

directly to the testing entities.

(6) Proposals submitted in one fiscal year, but not selected for cost-sharing of testing in that year, may be resubmitted to be considered for cost-sharing in the following year.

#### Subpart B—Biobased Product Eligibility for Federal Preference

##### § 2902.10 Communicating information on qualifying biobased products.

(a) Manufacturers and vendors are expected to provide relevant information to Federal agencies, upon request, with respect to product characteristics. USDA recommends that Federal agencies affirmatively seek this information. Manufacturers must be able to verify the biobased content in their products. The level of biobased content in the product is to be determined using the ASTM International standard that is a Radioisotope Standard Method to distinguish between carbon from fossil resources and that from renewable sources.

(b) Manufacturers and vendors must use the National Institute of Standards and Technology BEES (**B**uilding for **E**nvironmental and **E**conomic Sustainability) analytical tool to provide information on life cycle costs and environmental and health benefits to Federal agencies, when asked.

(c) In assessing performance of qualifying biobased products, USDA requires that Federal agencies rely on results of performance tests using applicable ASTM International, International Organization for Standardization (ISO), Federal or military specifications, or other similarly authoritative industry test standards. Such testing must be conducted by a third party ASTM/ISO compliant laboratory.

(d) Manufacturers and vendors are reminded that their advertising, labeling, and other marketing claims, including claims regarding health and environmental benefits of the product,

must conform to the Federal Trade Commission Guides for the Use of Environmental Marketing Claims, 16 CFR part 260.

§ 2902.11 Characteristics required for obtaining designated item status.

(a) All qualifying items under this program must have at least 5 percent of their total manufactured value (measured after manufacture at the location of manufacture) made up of biobased product(s).

(b) Minimum biobased content requirements in §2902.12 refer to the biobased portion of the product, and not the entire item. These requirements are in addition to the 5 percent total manufactured value requirement in paragraph (a) of this section.

(c) Manufacturers and vendors must utilize third party ASTM/ISO compliant test facilities using the ASTM International Radioisotope Standard Method to determine and certify the biobased content of their products offered for preferred procurement. Federal agencies and USDA may request verification of biobased content from manufacturers and vendors for products certified to qualify for preferred procurement.

(d)(1) Biobased content shall be determined based on the weight of the biobased material (exclusive of water and other non-active ingredients, fillers, and diluents) divided by the total weight of the product and expressed as a percentage by weight.

(2) In the case of products that are essentially the same formulation, but marketed under a variety of brand names, the manufacturer or vendor may refer to the underlying biobased content test data as the basis to demonstrate the biobased content, rather than conducting a biobased content test on each branded product.

(e) Products having mature markets are excluded from this program. For purposes of this program, a product has a mature market if the product falls within any of the following groups:

(1) Silk, cotton and wool garments, household items, and industrial or commercial products unless made with a substantial amount of biobased plastic product.

(2) Wood products made from traditionally-harvested forest materials.

(3) Products having significant national market penetration prior to 1972.

§ 2902.12 Items and minimum biobased content.

USDA shall designate items that meet the criteria set forth in this part as eligible for the procurement preference. In designating items, USDA will group items by category and will identify the minimum biobased content for each listed item. As items are designated for procurement preference, they will be added to this section.

Dated: \_\_\_\_\_, 2003

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Keith Collins, Chief Economist

United States Department of Agriculture