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§ 8101. Definitions

In this chapter:

(1) Administrator

The term “Administrator” means the Administrator of the Environmental Protection Agency.

(2) Biobased product

The term “biobased product” means 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 renew-

able domestic agricultural materials (including plant, animal, and marine materials) or forestry materials.

(3) Biomass**(A) In general**

The term “biomass” means any organic material that is available on a renewable or recurring basis.

(B) Inclusions

The term “biomass” includes—

- (i) agricultural crops;
- (ii) trees grown for energy production;
- (iii) wood waste and wood residues;
- (iv) plants (including aquatic plants and grasses);
- (v) residues;
- (vi) fibers;
- (vii) animal wastes and other waste materials; and
- (viii) fats, oils, and greases (including recycled fats, oils, and greases).

(C) Exclusions

The term “biomass” does not include—

- (i) paper that is commonly recycled; or
- (ii) unsegregated solid waste.

(4) Renewable energy

The term “renewable energy” means energy derived from—

- (A) a wind, solar, biomass, or geothermal source; or
- (B) hydrogen derived from biomass or water using an energy source described in subparagraph (A).

(5) Rural small business

The term “rural small business” has the meaning that the Secretary shall prescribe by regulation.

(6) Secretary

The term “Secretary” means the Secretary of Agriculture.

(Pub. L. 107–171, title IX, § 9001, May 13, 2002, 116 Stat. 475.)

REFERENCES IN TEXT

This chapter, referred to in text, was in the original “this title”, meaning title IX of Pub. L. 107–171, May 13, 2002, 116 Stat. 475, which enacted this chapter and amended section 6711 of this title and provisions set out as a note under section 7624 of this title. For complete classification of title IX to the Code, see Tables.

SHORT TITLE OF 2004 AMENDMENT

Pub. L. 108–199, div. A, title VII, § 778(a), Jan. 23, 2004, 118 Stat. 41, provided that: “This section [enacting section 8109 of this title] may be cited as the ‘Sun Grant Research Initiative Act of 2003’.”

BIOMASS RESEARCH AND DEVELOPMENT

Pub. L. 106–224, title III, June 20, 2000, 114 Stat. 428; as amended by Pub. L. 107–171, title IX, § 9008, May 13, 2002, 116 Stat. 483; Pub. L. 108–148, title II, § 201, Dec. 3, 2003, 117 Stat. 1901, provided that:

“SEC. 301. SHORT TITLE.

“This title may be cited as the ‘Biomass Research and Development Act of 2000’.

“SEC. 302. FINDINGS.

“Congress finds that—

“(1) conversion of biomass into biobased industrial products offers outstanding potential for benefit to the national interest through—

“(A) improved strategic security and balance of payments;

“(B) healthier rural economies;

“(C) improved environmental quality;

“(D) near-zero net greenhouse gas emissions;

“(E) technology export; and

“(F) sustainable resource supply;

“(2) the key technical challenges to be overcome in order for biobased industrial products to be cost-competitive are finding new technology and reducing the cost of technology for converting biomass into desired biobased industrial products;

“(3) biobased fuels, such as ethanol, have the clear potential to be sustainable, low cost, and high performance fuels that are compatible with both current and future transportation systems and provide near-zero net greenhouse gas emissions;

“(4) biobased chemicals have the clear potential for environmentally benign product life cycles;

“(5) biobased power can—

“(A) provide environmental benefits;

“(B) promote rural economic development; and

“(C) diversify energy resource options;

“(6) many biomass feedstocks suitable for industrial processing show the clear potential for sustainable production, in some cases resulting in improved soil fertility and carbon sequestration;

“(7)(A) grain processing mills are biorefineries that produce a diversity of useful food, chemical, feed, and fuel products; and

“(B) technologies that result in further diversification of the range of value-added biobased industrial products can meet a key need for the grain processing industry;

“(8)(A) cellulosic feedstocks are attractive because of their low cost and widespread availability; and

“(B) research resulting in cost-effective technology to overcome the recalcitrance of cellulosic biomass would allow biorefineries to produce fuels and bulk chemicals on a very large scale, with a commensurately large realization of the benefit described in paragraph (1);

“(9) research into the fundamentals to understand important mechanisms of biomass conversion can be expected to accelerate the application and advancement of biomass processing technology by—

“(A) increasing the confidence and speed with which new technologies can be scaled up; and

“(B) giving rise to processing innovations based on new knowledge;

“(10) the added utility of biobased industrial products developed through improvements in processing technology would encourage the design of feedstocks that would meet future needs more effectively;

“(11) the creation of value-added biobased industrial products would create new jobs in construction, manufacturing, and distribution, as well as new higher-valued exports of products and technology;

“(12)(A) because of the relatively short-term time horizon characteristic of private sector investments, and because many benefits of biomass processing are in the national interest, it is appropriate for the Federal Government to provide precommercial investment in fundamental research and research-driven innovation in the biomass processing area; and

“(B) such an investment would provide a valuable complement to ongoing and past governmental support in the biomass processing area; and

“(13) several prominent studies, including studies by the President's Committee of Advisors on Science and Technology and the National Research Council—

“(A) support the potential for large research-driven advances in technologies for production of biobased industrial products as well as associated benefits; and

“(B) document the need for a focused, integrated, and innovation-driven research effort to provide the appropriate progress in a timely manner.

“SEC. 303. DEFINITIONS.

“In this title:

“(1) **ADVISORY COMMITTEE.**—The term ‘Advisory Committee’ means the Biomass Research and Development Technical Advisory Committee established by section 306.

“(2) **BIOBASED INDUSTRIAL PRODUCT.**—The term ‘biobased industrial product’ means fuels, chemicals, building materials, or electric power or heat produced from biomass.

“(3) **BIOMASS.**—The term ‘biomass’ means any organic matter that is available on a renewable or recurring basis, including agricultural crops and trees, wood and wood wastes and residues, plants (including aquatic plants), grasses, residues, fibers, and animal wastes, municipal wastes, and other waste materials.

“(4) **BOARD.**—The term ‘Board’ means the Biomass Research and Development Board established by section 305.

“(5) **INITIATIVE.**—The term ‘Initiative’ means the Biomass Research and Development Initiative established under section 307.

“(6) **INSTITUTION OF HIGHER EDUCATION.**—The term ‘institution of higher education’ has the meaning given the term in section 102(a) of the Higher Education Act of 1965 (20 U.S.C. 1002(a)).

“(7) **NATIONAL LABORATORY.**—The term ‘national laboratory’ has the meaning given the term ‘laboratory’ in section 12(d) of the Stevenson-Wylder Technology Innovation Act of 1980 (15 U.S.C. 3710a(d)).

“(8) **POINT OF CONTACT.**—The term ‘point of contact’ means a point of contact designated under section 304(d).

“(9) **PROCESSING.**—The term ‘processing’ means the derivation of biobased industrial products from biomass, including—

“(A) feedstock production;

“(B) harvest and handling;

“(C) pretreatment or thermochemical processing;

“(D) fermentation;

“(E) catalytic processing;

“(F) product recovery; and

“(G) coproduct production.

“(10) **RESEARCH AND DEVELOPMENT.**—The term ‘research and development’ means research, development, and demonstration.

“SEC. 304. COOPERATION AND COORDINATION IN BIOMASS RESEARCH AND DEVELOPMENT.

“(a) **IN GENERAL.**—The Secretary of Agriculture and the Secretary of Energy shall cooperate with respect to, and coordinate, policies and procedures that promote research and development leading to the production of biobased industrial products.

“(b) **PURPOSES.**—The purposes of the cooperation and coordination shall be—

“(1) to understand the key mechanisms underlying the recalcitrance of biomass for conversion into biobased industrial products;

“(2) to develop new and cost-effective technologies that would result in large-scale commercial production of low cost and sustainable biobased industrial products;

“(3) to ensure that biobased industrial products are developed in a manner that enhances their economic, energy security, and environmental benefits; and

“(4) to promote the development and use of agricultural and energy crops for conversion into biobased industrial products.

“(c) **AREAS.**—In carrying out this title, the Secretary of Agriculture and the Secretary of Energy, in consultation with heads of appropriate departments and agencies, shall promote research and development—

“(1) to advance the availability and widespread use of energy efficient, economically competitive, and environmentally sound biobased industrial products in a manner that is consistent with the goals of the United States relating to sustainable and secure supplies of food, chemicals, and fuel;

“(2) to ensure full consideration of Federal land and land management programs as potential feedstock resources for biobased industrial products; and

“(3) to assess the environmental, economic, and social impact of production of biobased industrial products from biomass on a large scale.

“(d) POINTS OF CONTACT.—

“(1) IN GENERAL.—To coordinate research and development programs and activities relating to biobased industrial products that are carried out by their respective Departments—

“(A) the Secretary of Agriculture shall designate, as the point of contact for the Department of Agriculture, an officer of the Department of Agriculture appointed by the President to a position in the Department before the date of the designation, by and with the advice and consent of the Senate; and

“(B) the Secretary of Energy shall designate, as the point of contact for the Department of Energy, an officer of the Department of Energy appointed by the President to a position in the Department before the date of the designation, by and with the advice and consent of the Senate.

“(2) DUTIES.—The points of contact shall jointly—

“(A) assist in arranging interlaboratory and site-specific supplemental agreements for research and development projects relating to biobased industrial products;

“(B) serve as cochairpersons of the Board;

“(C) administer the Initiative; and

“(D) respond in writing to each recommendation of the Advisory Committee made under section 306(c).

“SEC. 305. BIOMASS RESEARCH AND DEVELOPMENT BOARD.

“(a) ESTABLISHMENT.—There is established the Biomass Research and Development Board, which shall supersede the Interagency Council on Biobased Products and Bioenergy established by Executive Order No. 13134 [set out below], to coordinate programs within and among departments and agencies of the Federal Government for the purpose of promoting the use of biobased industrial products by—

“(1) maximizing the benefits deriving from Federal grants and assistance; and

“(2) bringing coherence to Federal strategic planning.

“(b) MEMBERSHIP.—The Board shall consist of—

“(1) the point of contact of the Department of Energy designated under section 304(d)(1)(B), who shall serve as cochairperson of the Board;

“(2) the point of contact of the Department of Agriculture designated under section 304(d)(1)(A), who shall serve as cochairperson of the Board;

“(3) a senior officer of each of the Department of the Interior, the Environmental Protection Agency, the National Science Foundation, and the Office of Science and Technology Policy, each of whom shall—

“(A) be appointed by the head of the respective agency; and

“(B) have a rank that is equivalent to the rank of the points of contact; and

“(4) at the option of the Secretary of Agriculture and the Secretary of Energy, other members appointed by the Secretaries (after consultation with the members described in paragraphs (1) through (3)).

“(c) DUTIES.—The Board shall—

“(1) coordinate research and development activities relating to biobased industrial products—

“(A) between the Department of Agriculture and the Department of Energy; and

“(B) with other departments and agencies of the Federal Government; and

“(2) provide recommendations to the points of contact concerning administration of this title.

“(d) FUNDING.—Each agency represented on the Board is encouraged to provide funds for any purpose under this title.

“(e) MEETINGS.—The Board shall meet at least quarterly to enable the Board to carry out the duties of the Board under subsection (c).

“SEC. 306. BIOMASS RESEARCH AND DEVELOPMENT TECHNICAL ADVISORY COMMITTEE.

“(a) ESTABLISHMENT.—There is established the Biomass Research and Development Technical Advisory

Committee, which shall supersede the Advisory Committee on Biobased Products and Bioenergy established by Executive Order No. 13134 [set out below]—

“(1) to advise the Secretary of Energy, the Secretary of Agriculture, and the points of contact concerning—

“(A) the technical focus and direction of requests for proposals issued under the Initiative; and

“(B) procedures for reviewing and evaluating the proposals;

“(2) to facilitate consultations and partnerships among Federal and State agencies, agricultural producers, industry, consumers, the research community, and other interested groups to carry out program activities relating to the Initiative; and

“(3) to evaluate and perform strategic planning on program activities relating to the Initiative.

“(b) MEMBERSHIP.—

“(1) IN GENERAL.—The Advisory Committee shall consist of—

“(A) an individual affiliated with the biobased industrial products industry;

“(B) an individual affiliated with an institution of higher education who has expertise in biobased industrial products;

“(C) two prominent engineers or scientists from government or academia who have expertise in biobased industrial products;

“(D) an individual affiliated with a commodity trade association;

“(E) an individual affiliated with an environmental or conservation organization;

“(F) an individual associated with State government who has expertise in biobased industrial products;

“(G) an individual with expertise in energy analysis;

“(H) an individual with expertise in the economics of biobased industrial products;

“(I) an individual with expertise in agricultural economics; and

“(J) at the option of the points of contact, other members.

“(2) APPOINTMENT.—The members of the Advisory Committee shall be appointed by the points of contact.

“(c) DUTIES.—The Advisory Committee shall—

“(1) advise the points of contact with respect to the Initiative; and

“(2) evaluate whether, and make recommendations in writing to the Board to ensure that—

“(A) funds authorized for the Initiative are distributed and used in a manner that is consistent with the goals of the Initiative;

“(B) the points of contact are funding proposals under this title that are selected on the basis of merit, as determined by an independent panel of scientific and technical peers; and

“(C) activities under this title are carried out in accordance with this title.

“(d) COORDINATION.—To avoid duplication of effort, the Advisory Committee shall coordinate its activities with those of other Federal advisory committees working in related areas.

“(e) MEETINGS.—The Advisory Committee shall meet at least quarterly to enable the Advisory Committee to carry out the duties of the Advisory Committee under subsection (c).

“(f) TERMS.—Members of the Advisory Committee shall be appointed for a term of 3 years, except that—

“(1) one-third of the members initially appointed shall be appointed for a term of 1 year; and

“(2) one-third of the members initially appointed shall be appointed for a term of 2 years.

“SEC. 307. BIOMASS RESEARCH AND DEVELOPMENT INITIATIVE.

“(a) IN GENERAL.—The Secretary of Agriculture and the Secretary of Energy, acting through their respective points of contact and in consultation with the

Board, shall establish and carry out a Biomass Research and Development Initiative under which competitively awarded grants, contracts, and financial assistance are provided to, or entered into with, eligible entities to carry out research on biobased industrial products.

“(b) PURPOSES.—The purposes of grants, contracts, and assistance under this section shall be—

“(1) to stimulate collaborative activities by a diverse range of experts in all aspects of biomass processing for the purpose of conducting fundamental and innovation-targeted research and technology development;

“(2) to enhance creative and imaginative approaches toward biomass processing that will serve to develop the next generation of advanced technologies making possible low cost and sustainable biobased industrial products;

“(3) to strengthen the intellectual resources of the United States through the training and education of future scientists, engineers, managers, and business leaders in the field of biomass processing; and

“(4) to promote integrated research partnerships among colleges, universities, national laboratories, Federal and State research agencies, and the private sector as the best means of overcoming technical challenges that span multiple research and engineering disciplines and of gaining better leverage from limited Federal research funds.

“(c) ELIGIBLE ENTITIES.—

“(1) IN GENERAL.—To be eligible for a grant, contract, or assistance under this section, an applicant shall be—

“(A) an institution of higher education;

“(B) a national laboratory;

“(C) a Federal research agency;

“(D) a State research agency;

“(E) a private sector entity;

“(F) a nonprofit organization; or

“(G) a consortium of two or more entities described in subparagraphs (A) through (F).

“(2) ADMINISTRATION.—After consultation with the Board, the points of contact shall—

“(A) publish annually one or more joint requests for proposals for grants, contracts, and assistance under this section;

“(B) establish a priority in grants, contracts, and assistance under this section for research that—

“(i) demonstrates potential for significant advances in biomass processing;

“(ii) demonstrates potential to substantially further scale-sensitive national objectives such as—

“(I) sustainable resource supply;

“(II) reduced greenhouse gas emissions;

“(III) healthier rural economies; and

“(IV) improved strategic security and trade balances; and

“(iii) would improve knowledge of important biomass processing systems that demonstrate potential for commercial applications;

“(C) require that grants, contracts, and assistance under this section be awarded competitively, on the basis of merit, after the establishment of procedures that provide for scientific peer review by an independent panel of scientific and technical peers; and

“(D) give preference to applications that—

“(i) involve a consortia of experts from multiple institutions; and

“(ii) encourage the integration of disciplines and application of the best technical resources.

“(d) USES OF GRANTS, CONTRACTS, AND ASSISTANCE.—A grant, contract, or assistance under this section may be used to conduct—

“(1) research on process technology for overcoming the recalcitrance of biomass, including research on key mechanisms, advanced technologies, and demonstration test beds for—

“(A) feedstock pretreatment and hydrolysis of cellulose and hemicellulose, including new technologies for—

“(i) enhanced sugar yields;

“(ii) lower overall chemical use;

“(iii) less costly materials; and

“(iv) cost reduction;

“(B) development of novel organisms and other approaches to substantially lower the cost of cellulase enzymes and enzymatic hydrolysis, including dedicated cellulase production and consolidated bioprocessing strategies; and

“(C) approaches other than enzymatic hydrolysis for overcoming the recalcitrance of cellulosic biomass;

“(2) research on technologies for diversifying the range of products that can be efficiently and cost-competitively produced from biomass, including research on—

“(A) metabolic engineering of biological systems (including the safe use of genetically modified crops) to produce novel products, especially commodity products, or to increase product selectivity and tolerance, with a research priority for the development of biobased industrial products that can compete in performance and cost with fossil-based products;

“(B) catalytic processing to convert intermediates of biomass processing into products of interest;

“(C) separation technologies for cost-effective product recovery and purification;

“(D) approaches other than metabolic engineering and catalytic conversion of intermediates of biomass processing;

“(E) advanced biomass gasification technologies, including coproduction of power and heat as an integrated component of biomass processing, with the possibility of generating excess electricity for sale; and

“(F) related research in advanced turbine and stationary fuel cell technology for production of electricity from biomass; and

“(3) research aimed at ensuring the environmental performance and economic viability of biobased industrial products and their raw material input of biomass when considered as an integrated system, including research on—

“(A) the analysis of, and strategies to enhance, the environmental performance and sustainability of biobased industrial products, including research on—

“(i) accurate measurement and analysis of greenhouse gas emissions, carbon sequestration, and carbon cycling in relation to the life cycle of biobased industrial products and feedstocks with respect to other alternatives;

“(ii) evaluation of current and future biomass resource availability;

“(iii) development and analysis of land management practices and alternative biomass cropping systems that ensure the environmental performance and sustainability of biomass production and harvesting;

“(iv) the land, air, water, and biodiversity impacts of large-scale biomass production, processing, and use of biobased industrial products relative to other alternatives; and

“(v) biomass gasification and combustion to produce electricity;

“(B) the analysis of, and strategies to enhance, the economic viability of biobased industrial products, including research on—

“(i) the cost of the required process technology;

“(ii) the impact of coproducts, including food, animal feed, and fiber, on biobased industrial product price and large-scale economic viability; and

“(iii) interactions between an emergent biomass refining industry and the petrochemical refining infrastructure; and

“(C) the field and laboratory research related to feedstock production with the interrelated goals of enhancing the sustainability, increasing productiv-

ity, and decreasing the cost of biomass processing, including research on—

“(i) altering biomass to make biomass easier and less expensive to process;

“(ii) existing and new agricultural and energy crops that provide a sustainable resource for conversion to biobased industrial products while simultaneously serving as a source for coproducts such as food, animal feed, and fiber;

“(iii) improved technologies for harvest, collection, transport, storage, and handling of crop and residue feedstocks; and

“(iv) development of economically viable cropping systems that improve the conservation and restoration of marginal land;

“(4) any research and development in technologies or processes determined by the Secretary of Agriculture and the Secretary of Energy, acting through their respective points of contact and in consultation with the Board, to be consistent with the purposes described in subsection (b) and the priority described in subsection (c)(2)(B); or

“(5) research to integrate silviculture, harvesting, product development, processing information, and economic evaluation to provide the science, technology, and tools to forest managers and community developers for use in evaluating forest treatment and production alternatives, including—

“(A) to develop tools that would enable land managers, locally or in a several-State region, to estimate—

“(i) the cost to deliver varying quantities of wood to a particular location; and

“(ii) the amount that could be paid for stumpage if delivered wood was used for a specific mix of products;

“(B) to conduct research focused on developing appropriate thinning systems and equipment designs that are—

“(i) capable of being used on land without significant adverse effects on the land;

“(ii) capable of handling large and varied landscapes;

“(iii) adaptable to handling a wide variety of tree sizes;

“(iv) inexpensive; and

“(v) adaptable to various terrains; and

“(C) to develop, test, and employ in the training of forestry managers and community developers curricula materials and training programs on matters described in subparagraphs (A) and (B).

“(e) TECHNOLOGY AND INFORMATION TRANSFER TO AGRICULTURAL USERS.—

“(1) IN GENERAL.—The Administrator of the Cooperative State Research, Education, and Extension Service and the Chief of the Natural Resources Conservation Service shall ensure that applicable research results and technologies from the Initiative are adapted, made available, and disseminated through their respective services, as appropriate.

“(2) REPORT.—Not later than 5 years after the date of the enactment of this Act [June 20, 2000], the Administrator of the Cooperative State Research, Education, and Extension Service and the Chief of the Natural Resources Conservation Service shall submit to the committees of Congress with jurisdiction over the Initiative a report on the activities conducted by the services under this subsection.

“SEC. 308. ADMINISTRATIVE SUPPORT AND FUNDS.

“(a) IN GENERAL.—To the extent administrative support and funds are not provided by other agencies under subsection (b), the Secretary of Energy and the Secretary of Agriculture may provide such administrative support and funds of the Department of Energy and the Department of Agriculture to the Board and the Advisory Committee as are necessary to enable the Board and the Advisory Committee to carry out their duties under this title.

“(b) OTHER AGENCIES.—The heads of the agencies referred to in section 305(b)(3), and the other members ap-

pointed under section 305(b)(4), may, and are encouraged to, provide administrative support and funds of their respective agencies to the Board and the Advisory Committee.

“(c) LIMITATION.—Not more than 4 percent of the amount appropriated for each fiscal year under section 307(f) may be used to pay the administrative costs of carrying out this title.

“SEC. 309. REPORTS.

“(a) INITIAL REPORT.—Not later than 180 days after the date of the enactment of this Act [June 20, 2000], the Secretary of Energy and the Secretary of Agriculture shall jointly submit to Congress a report that—

“(1) identifies the points of contact, the members of the Board, and the members of the Advisory Committee;

“(2) describes the status of current biobased industrial product research and development efforts in both the Federal Government and private sector;

“(3) includes a section prepared by the Board that establishes a set of criteria to assess the potential of biobased industrial products, which shall include for both biomass production and transformation into biobased industrial products—

“(A) an energy accounting;

“(B) an environmental impact assessment; and

“(C) an economic assessment; and

“(4) describes the research and development goals of the Initiative, including how funds will be allocated in order to accomplish those goals.

“(b) ANNUAL REPORTS.—For each fiscal year for which funds are made available to carry out this title, the Secretary of Energy and the Secretary of Agriculture shall jointly submit to Congress a detailed report on—

“(1) the status and progress of the Initiative, including a report from the Advisory Committee on whether funds appropriated for the Initiative have been distributed and used in a manner that—

“(A) is consistent with the purposes described in section 307(b);

“(B) uses the set of criteria established under subsection (a)(3); and

“(C) takes into account any recommendations that have been made by the Advisory Committee;

“(2) the general status of cooperation and research and development efforts carried out at each agency with respect to biobased industrial products, including a report from the Advisory Committee on whether the points of contact are funding proposals that are selected under section 307(c)(2)(C); and

“(3) the plans of the Secretary of Energy and the Secretary of Agriculture for addressing concerns raised in the report, including concerns raised by the Advisory Committee.

“SEC. 310. FUNDING.

“(a) FUNDING.—Of funds of the Commodity Credit Corporation, the Secretary shall make available to carry out this title—

“(1) \$5,000,000 for fiscal year 2002; and

“(2) \$14,000,000 for each of fiscal years 2003 through 2007;

to remain available until expended.

“(b) AUTHORIZATION OF APPROPRIATIONS.—In addition to amounts transferred under subsection (a), there are authorized to be appropriated to carry out this title \$54,000,000 for each of fiscal years 2002 through 2007.

“SEC. 311. TERMINATION OF AUTHORITY.

“The authority provided under this title shall terminate on September 30, 2007.”

EX. ORD. NO. 13134. DEVELOPING AND PROMOTING BIOBASED PRODUCTS AND BIOENERGY

Ex. Ord. No. 13134, Aug. 12, 1999, 64 F.R. 44639, as amended by Ex. Ord. No. 13225, §3(a), Sept. 28, 2001, 66 F.R. 50291, provided:

By the authority vested in me as President by the Constitution and the laws of the United States of America, including the Federal Advisory Committee

Act, as amended (5 U.S.C. App.), and in order to stimulate the creation and early adoption of technologies needed to make biobased products and bioenergy cost-competitive in large national and international markets, it is hereby ordered as follows:

SECTION 1. Policy. Current biobased product and bioenergy technology has the potential to make renewable farm and forestry resources major sources of affordable electricity, fuel, chemicals, pharmaceuticals, and other materials. Technical advances in these areas can create an expanding array of exciting new business and employment opportunities for farmers, foresters, ranchers, and other businesses in rural America. These technologies can create new markets for farm and forest waste products, new economic opportunities for under-used land, and new value-added business opportunities. They also have the potential to reduce our Nation's dependence on foreign oil, improve air quality, water quality, and flood control, decrease erosion, and help minimize net production of greenhouse gases. It is the policy of this Administration, therefore, to develop a comprehensive national strategy, including research, development, and private sector incentives, to stimulate the creation and early adoption of technologies needed to make biobased products and bioenergy cost-competitive in large national and international markets.

SEC. 2. Establishment of the Interagency Council on Biobased Products and Bioenergy. (a) There is established the Interagency Council on Biobased Products and Bioenergy (the "Council"). The Council shall be composed of the Secretaries of Agriculture, Commerce, Energy, and the Interior, the Administrator of the Environmental Protection Agency, the Director of the Office of Management and Budget, the Assistant to the President for Science and Technology, the Director of the National Science Foundation, the Federal Environmental Executive, and the heads of other relevant agencies as may be determined by the Co-Chairs of the Council. Members may serve on the Council through designees. Designees shall be senior officials who report directly to the agency head (Assistant Secretary or equivalent).

(b) The Secretary of Agriculture and the Secretary of Energy shall serve as Co-Chairs of the Council.

(c) The Council shall prepare annually a strategic plan for the President outlining overall national goals in the development and use of biobased products and bioenergy in an environmentally sound manner and how these goals can best be achieved through Federal programs and integrated planning. The goals shall include promoting national economic growth with specific attention to rural economic interests, energy security, and environmental sustainability and protection. These strategic plans shall be compatible with the national goal of producing safe and affordable supplies of food, feed, and fiber in a way that is sustainable and protects the environment, and shall include measurable objectives. Specifically, these strategic plans shall cover the following areas:

(1) biobased products, including commercial and industrial chemicals, pharmaceuticals, products with large carbon sequestering capacity, and other materials; and

(2) biomass used in the production of energy (electricity; liquid, solid, and gaseous fuels; and heat).

(d) To ensure that the United States takes full advantage of the potential economic and environmental benefits of bioenergy, these strategic plans shall be based on analyses of: (1) the economic impacts of expanded biomass production and use; and (2) the impacts on national environmental objectives, including reducing greenhouse gas emissions. Specifically, these plans shall include:

(1) a description of priorities for research, development, demonstration, and other investments in biobased products and bioenergy;

(2) a coordinated Federal program of research, building on the research budgets of each participating agency; and

(3) proposals for using existing agency authorities to encourage the adoption and use of biobased products and bioenergy and recommended legislation for modifying these authorities or creating new authorities if needed.

(e) The first annual strategic plan shall be submitted to the President within 8 months from the date of this order.

(f) The Council shall coordinate its activities with actions called for in all relevant Executive orders and shall not be in conflict with proposals advocated by other Executive orders.

[SECS. 3 and 4. Revoked by Ex. Ord. No. 13225, §3(a), Sept. 28, 2001, 66 F.R. 50291.]

SEC. 5. Duties of the Departments of Agriculture and Energy. The Secretaries of the Departments of Agriculture and Energy, to the extent permitted by law and subject to the availability of appropriations, shall each establish a working group on biobased products and biobased activities in their respective Departments. Consistent with the Federal biobased products and bioenergy strategic plans described in sections 2(c) and (d) of this order, the working groups shall:

(1) provide strategic planning and policy advice on the Department's research, development, and commercialization of biobased products and bioenergy; and

(2) identify research activities and demonstration projects to address new opportunities in the areas of biomass production, biobased product and bioenergy production, and related fundamental research.

The chair of each Department's working group shall be a senior official who reports directly to the agency head. If the Secretary of Agriculture or Energy serves on the Interagency Council on Biobased Products and Bioenergy through a designee, the designee should be the chair of the Department's working group.

SEC. 6. Establishment of a National Biobased Products and Bioenergy Coordination Office. Within 120 days of this order, the Secretaries of Agriculture and Energy shall establish a joint National Biobased Products and Bioenergy Coordination Office ("Office") to ensure effective day-to-day coordination of actions designed to implement the strategic plans and guidance provided by the Council and respond to recommendations made by the Committee. All agencies represented on the Council, or that have capabilities and missions related to the work of the Council, shall be invited to participate in the operation of the Office. The Office shall:

(a) serve as an executive secretariat and support the work of the Council, as determined by the Council, including the coordination of multi-agency, integrated research, development, and demonstration ("RD&D") activities;

(b) use advanced communication and computational tools to facilitate research coordination and collaborative research by participating Federal and nonfederal research facilities and to perform activities in support of RD&D on biobased product and bioenergy development, including strategic planning, program analysis and evaluation, communications networking, information and data dissemination and technology transfer, and collaborative team building for RD&D projects; and

(c) facilitate use of new information technologies for rapid dissemination of information on biobased products and bioenergy to and among farm operators; agribusiness, chemical, forest products, energy, and other business sectors; the university community; and public interest groups that could benefit from timely and reliable information.

SEC. 7. Definitions. For the purposes of this order: (a) The term "biomass" means any organic matter that is available on a renewable or recurring basis (excluding old-growth timber), including dedicated energy crops and trees, agricultural food and feed crop residues, aquatic plants, wood and wood residues, animal wastes, and other waste materials.

(b) The term "biobased product," as defined in Executive Order 13101 [42 U.S.C. 6961 note], means a commercial or industrial product (other than food or feed) that

utilizes biological products or renewable domestic agricultural (plant, animal, and marine) or forestry materials.

(c) The term “bioenergy” means biomass used in the production of energy (electricity; liquid, solid, and gaseous fuels; and heat).

(d) The term “old growth timber” means timber of a forest from the late successional stage of forest development. The forest contains live and dead trees of various sizes, species, composition, and age class structure. The age and structure of old growth varies significantly by forest type and from one biogeoclimatic zone to another.

SEC. 8. *Judicial Review.* This order does not create any enforceable rights against the United States, its agencies, its officers, or any person.

§ 8102. Federal procurement of biobased products

(a) Application of section

Except as provided in subsection (c) of this section, each Federal agency shall comply with the requirements set forth in this section and any regulations issued under this section, with respect to any purchase or acquisition of a procurement item where the purchase price of the item exceeds \$10,000 or where the quantity of such items or of functionally equivalent items purchased or acquired in the course of the preceding fiscal year was \$10,000 or more.

(b) Procurement subject to other law

Any procurement, by any Federal agency, which is subject to regulations of the Administrator under section 6962 of title 42, shall not be subject to the requirements of this section to the extent that such requirements are inconsistent with such regulations.

(c) Procurement preference

(1) Except as provided in paragraph (2), after the date specified in applicable guidelines prepared pursuant to subsection (e) of this section, each Federal agency which procures any items designated in such guidelines shall, in making procurement decisions, give preference to such items composed of the highest percentage of biobased products practicable, consistent with maintaining a satisfactory level of competition, considering such guidelines.

(2) **AGENCY FLEXIBILITY.**—Notwithstanding paragraph (1), an agency may decide not to procure such items if the agency determines that the items—

(A) are not reasonably available within a reasonable period of time;

(B) fail to meet the performance standards set forth in the applicable specifications or fail to meet the reasonable performance standards of the procuring agencies; or

(C) are available only at an unreasonable price.

(3) After the date specified in any applicable guidelines prepared pursuant to subsection (e) of this section, contracting offices shall require that, with respect to biobased products, vendors certify that the biobased products to be used in the performance of the contract will comply with the applicable specifications or other contractual requirements.

(d) Specifications

All Federal agencies that have the responsibility for drafting or reviewing specifications for

procurement items procured by Federal agencies shall, within one year after the date of publication of applicable guidelines under subsection (e) of this section, or as otherwise specified in such guidelines, assure that such specifications require the use of biobased products consistent with the requirements of this section.

(e) Guidelines

(1) In general

The Secretary, after consultation with the Administrator, the Administrator of General Services, and the Secretary of Commerce (acting through the Director of the National Institute of Standards and Technology), shall prepare, and from time to time revise, guidelines for the use of procuring agencies in complying with the requirements of this section. Such guidelines shall—

(A) designate those items which are or can be produced with biobased products and whose procurement by procuring agencies will carry out the objectives of this section;

(B) set forth recommended practices with respect to the procurement of biobased products and items containing such materials and with respect to certification by vendors of the percentage of biobased products used; and

(C) provide information as to the availability, relative price, performance, and environmental and public health benefits, of such materials and items and where appropriate shall recommend the level of biobased material to be contained in the procured product.

(2) Considerations

In making the designation under paragraph (1)(A), the Secretary shall, at a minimum, consider—

(A) the availability of such items; and

(B) the economic and technological feasibility of using such items, including life cycle costs.

(3) Final guidelines

The Secretary shall prepare final guidelines under this section within 180 days after May 13, 2002.

(f) Office of Federal Procurement Policy

The Office of Federal Procurement Policy, in cooperation with the Secretary, shall implement the requirements of this section. It shall be the responsibility of the Office of Federal Procurement Policy to coordinate this policy with other policies for Federal procurement to implement the requirements of this section, and, every two years beginning in 2003, to report to the Congress on actions taken by Federal agencies and the progress made in the implementation of this section, including agency compliance with subsection (d) of this section.

(g) Procurement program

(1) Within one year after the date of publication of applicable guidelines under subsection (e) of this section, each Federal agency shall develop a procurement program which will assure that items composed of biobased products will be purchased to the maximum extent prac-