June 15, 2010

Section 9005 Bioenergy Program Proposed Rulemaking
(Document ID RBS-10-BUSINESS-0010-0001)

DEPARTMENT OF AGRICULTURE
Rural Business-Cooperative Service
7 CFR Part 4288
RIN 0570–AA75
Subpart B—Advanced Biofuel Payment Program
AGENCY: Rural Business-Cooperative Service, USDA.
ACTION: Proposed rule.
Branch Chief
Regulations and Paperwork Management Branch
U.S. Department of Agriculture
STOP 0742
1400 Independence Avenue, SW., Washington, DC 20250–0742

Comments of Biotechnology Industry Organization:
United States Department of Agriculture
Bioenergy Program
Proposed Rule http://www.ascension-publishing.com/BIZ/USDABiorefineryPayments.pdf

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Introduction

The Biotechnology Industry Organization ("BIO") would like to thank the United States Department of Agriculture ("USDA") for its support of advanced biofuels production and commercialization as well as the opportunity to provide comments on the Section 9005 Bioenergy Program proposed rule as issued.

BIO is the world's largest biotechnology organization, providing advocacy, business development and communications services for more than 1,200 members worldwide. In our Industrial and Environmental Section our companies represent the entire value chain of biofuels and biobased products from dedicated energy crop and other feedstock producers, enzyme companies, commercial scale integrated biorefinery developers and large chemical, energy and oil companies.

BIO supports the USDA Bioenergy Program goal of expanding production of advanced biofuels by providing payments to eligible Advanced Biofuel Producers. However, we would like to stress that the primary purpose of this program should be to reduce our dependence on foreign petroleum by incentivizing production of alternative, renewable liquid transportation fuels to help achieve the production volumes set in the Renewable Fuel Standard ("RFS") (specifically fuel "used to replace or reduce fossil fuel present in transportation fuel") passed as part of the Energy Independence and Security Act of 2007.

USDA is the primary agency charged with commercialization of the advanced biofuels industry and we look forward to working with the department to ensure this and other energy related programs at the agency work efficiently to support the advanced biofuels industry. Below are BIO's comments on issues of interest contained in the proposed rule for the Bioenergy Program, established in Section 9005 of the Food, Conservation, and Energy Act of 2008.

Advanced Biofuel Definition

The definition of advanced biofuels in the Food, Conservation, and Energy Act of 2008 leaves some ambiguity in regards to the inclusion of biofuels derived from sugar and starch. USDA should clarify that advanced biofuels other than ethanol, for example fuels with a different molecular structure such as biobutanol, produced from a corn starch feedstock, qualify for this program under the definition of advanced biofuel in the Food, Conservation, and Energy Act of 2008. The proposed rule for this program states that "to be eligible for payments, advanced biofuels must be produced from renewable biomass, excluding corn kernel starch, in a biorefinery located in the United States". The inclusions section of the advanced biofuel definition in the legislation specifically includes "(ii) biofuel derived from sugar and starch (other than ethanol derived from corn kernel starch) and (vi) butanol or other alcohols produced through the conversion of organic matter from renewable biomass".

Recommendation: BIO requests that USDA clarify in the final rule that the only fuel produced from corn kernel starch excluded from this program is ethanol, per the legislation.

End Use

USDA is seeking comment on the potential internal uses of advanced biofuel produced at a facility and whether that fuel should be entitled to program payments and also whether fuel produced for end uses other than transportation fuel should be eligible.

The future biorefinery will likely develop much like the typical oil refinery of today. In other words, one feedstock will be utilized to produce several products at one facility. In a biorefinery's case, renewable biomass will be the feedstock and multiple biofuels, biobased products and specialty renewable chemicals could be produced at the same plant or industrial facility. USDA should encourage the concept of industrial ecology and collocation of diverse product manufacturing units. The final rule for the Bioenergy Program should not limit future biorefineries that use efficient and cost effective business models. It should be specifically stated in the final rule that advanced biofuels produced at a biorefinery producing multiple bioproducts should be eligible to qualify for the program.

Recommendation: BIO requests that USDA clearly state that advanced biofuels produced at a biorefinery producing multiple bioproducts are eligible for the program in the final rule.

Quantification of Small and Large Producers

Legislation for this program requires that not more than 5% of the funds be made available to eligible producers for production at facilities with capacity exceeding 150 million gallons per year. BIO believes this legislative provision requires USDA to specify that this capacity calculation does not include a producer's non-advanced biofuel capacity, should it have facilities in the US producing additional gallons that do not qualify for this program. The 150 million gallon limit should only include a producer's advanced biofuel capacity.

In addition, a per gallon limit for small and large producers is only applicable to liquid advanced biofuels producers. Since the definition of advanced biofuels in this proposed rule applies to solid, liquid, or gaseous fuels, USDA needs to determine how they will define small and large producers of gaseous and solid advanced biofuels, should they qualify for this program.

Recommendation: BIO requests that USDA specify in the final rule that the capacity calculation does not include a producer's non-advanced biofuel capacity, should it have facilities in the US producing additional gallons that do not qualify for this program.

Production in Non-Rural Areas

USDA is seeking comment on whether eligibility for this program should be limited to facilities located in rural areas.

While we recognize the importance for USDA to increase economic opportunity and improve the quality of life in rural communities, we caution against defining "Rural Area" with too much restriction, potentially disqualifying ideal sites for biorefineries that would, in fact, meet the program goals and increase economic opportunity in rural communities, but may be located in areas that do not fit the program definition. USDA's proposed definition of Rural Area per the proposed rule:

Any area of a State not in a city or town that has a population of more than 50,000 inhabitants, according to the latest decennial census of the United States, and the contiguous and adjacent urbanized area, and any area that has been determined to be ''rural in character'' by the Under Secretary for Rural Development, or as otherwise identified in this definition. In determining which census blocks in an urbanized area are not in a rural area, the Agency will exclude any cluster of census blocks that would otherwise be considered not in a Rural Area only because the cluster is adjacent to not more than two census blocks that are otherwise considered not in a rural area under this definition.

For a biorefinery, the cost of feedstock can typically represent 80% of the total cost of finished product. As a general rule, a majority of the feedstock will inherently come from the rural community, and be produced/collected/harvested by a local labor force. Similarly construction and operation workforces will be predominantly local. The rural economic development potential resulting from a biorefinery is substantial. One advantage of advanced biofuels is that they can be produced all over the country utilizing a variety of feedstocks. Projects should not be evaluated negatively on one the advanced biofuels industry's greatest assets, flexibility. Offering eligibility to facilities in non-rural communities is critical to the success of the program goals and the advanced biofuels industry. Restricting the location of these facilities is not necessary to maintain the spirit of enhancing rural development and the geographic diversity of advanced biofuels production. More flexibility of site selection, not less, should be installed in these programs.

Further, having a consistent, cost competitive regional supply of feedstock is key to the success of any project. Non rural plants that use agricultural feedstocks will most certainly rely on the surrounding rural communities to produce, harvest, store, and handle feedstock needs. With feedstock cost representing the largest operational cost of a biorefinery, this in turn means that most of what the plant spends goes to the rural community in paying for that feedstock. This should demonstrate that the biorefinery does not need to be in a rural area to fulfill program goals. Excluding plants that are not in rural areas denies the supporting rural community significant opportunity.

Recommendation: BIO strongly recommends USDA not impose location restrictions on placement of eligible biorefineries.

Payment Rates

USDA has proposed two payment rates for advanced biofuels production. The base production rate is equal to: the quantity of eligible advanced biofuel produced in the 12 months immediately preceding the first day of the sign up period for the fiscal year for which payment is sought for a biorefinery that has been in existence for 12 months or more or the quantity of advanced biofuel that is projected to be produced by the producer for a biorefinery that has been in existence less than 12 months prior to the sign up period for the fiscal year for which payment is sought or will begin producing on or after October 1 of the sign-up fiscal year. The second proposed payment rate is incremental production defined as: the quantity of eligible advanced biofuel produced at the biorefinery that is in excess of that biorefineries base production. The incremental production rate will be five times higher than the base rate.

We understand the importance of enabling new production and the spirit of incentivizing incremental production. This mechanism should work to incentivize additional production of advanced biofuels over current volumes. However, the rule as written seems to incentivize reduced production in the base year, so the facility can take advantage of a 5x multiplier in the subsequent year. We believe this would not be productive for the advanced biofuel industry. The proposal states that "for a biorefinery that has been in existence less than 12 months before October 1 of the sign-up fiscal year or that begins producing eligible advanced biofuels on or after October 1 of the sign-up fiscal year, there is no incremental production; all production for that sign-up fiscal year will be considered base production". We do not believe this is or should be the intention of the program and USDA should revisit their definition of base production rate so that facilities coming online will be incentivized to bring as much capacity into production as early as possible.

Recommendation: USDA should revisit their definition of base production rate so that facilities coming online will be incentivized to bring as much capacity into production as early as possible.

Lifecycle Greenhouse Gas Requirements

The proposed rule is asking for comment on their consideration of an approach to offer different payment rates based on the advanced biofuels' lifecycle greenhouse gas (GHG) emissions.

This approach would offer a significantly higher payment rate for biofuels that are demonstrated to significantly reduce GHGs emissions relative to the conventional fuels that they replace; biofuels that do not demonstrate significant GHG reductions would receive the lower payment rate.

It is important to remember the industry must fulfill the advanced biofuel requirement of the RFS. BIO believes that the USDA Bioenergy Program regulations should be kept simple to encourage streamlined administration of the program. While we do not believe that the indirect land use change calculations included in the RFS regulation are mature or have been adequately vetted in the scientific community, if USDA does include lifecycle GHG emission reduction benchmarks as a way to reward lower emitting fuels with a higher payment rate we recommend: 1) Relying on already established regulations instead of creating a new set of regulations for those calculations (i.e. EPA RFS) and 2) Not complicating the program with multiple payment levels USDA will need to create and monitor, simply create a higher payment rate for advanced biofuels, as defined in the Farm Bill, that meet the RFS lifecycle GHG emission reduction requirements. Also, we urge USDA to make sure the program is flexible so that a producer can reapply in order to meet the higher payment criteria for the same project as it evolves.

It should also be assumed that producers of advanced liquid biofuels would not produce fuels that do not meet the RFS qualifications, therefore, including lifecycle GHG emission reduction requirements in this program for liquid transportation fuels would be redundant and we would caution against adding any unnecessary regulations to this program that could slow or complicate the process and therefore retard commercialization and production.

Once again, liquid biofuels are the only advanced biofuels that currently have a regulatory framework in place for measuring GHG emission reductions compared to their counterparts. Since the definition of advanced biofuels in this proposed rule applies to solid, liquid, or gaseous fuels, USDA would need to determine how they will quantify gaseous and solid advanced biofuels emission reductions when compared to their counterparts.

For reference, BIO submitted in its comments to the proposed rule by EPA on the administration of the RFS, opinions of land use change in the regulation, a relevant except is below:

> *RFS driven biofuels demand on global agricultural land are miniscule compared to other land use factors. This does not mean that we can ignore the indirect land use effects of biofuels, since the goal ultimately for biofuels would be to play an even larger role in the energy supply. It does suggest, however, that current policies can be designed in such a way that they encourage investment in biofuels without immediate risk of severe land impacts. In the meantime, further analysis can be done to determine how and if policies for large scale deployment can be implemented to safeguard land resources and prevent unintended carbon emissions.*
>
> *Regulating land use related emissions of carbon through biofuels may result in the premature stifling of a potentially important sustainable energy resource for transportation, while doing nothing to address the serious problems of unsustainable global land management that continue to destroy valuable natural land resources and to contribute a tremendous amount of carbon to the atmosphere.*
>
> *Unsustainable farm practices worldwide may be responsible for as much as 5 million hectares per year of lost agricultural land due to degradation and loss of performance. To put that number in context, this annual loss of land is equivalent to losing 1 to 2 billion gallons of annual ethanol production each year.*
>
> *Given these considerations, BIO urges EPA to fully acknowledge the extent of the uncertainty in estimation of emissions from land use change, and ensure that emerging biofuels technologies are not disqualified from participation in the RFS2 program unless clearly demonstrated to be out of compliance with the program's GHG performance requirements under the full range of reasonable assumptions for the pertinent methodology, including assumptions that have not been adopted in EPA's proposed methodology.*
>
> *Specifically, should a biofuel satisfy its GHG performance requirement under any reasonable set of assumptions under EPA's uncertainty analysis, it should be deemed to qualify.*

Recommendation: In order to expedite the administration of this program to ensure the timely and effective issuance of incentives to qualified advanced biofuel producers BIO strongly recommends that if USDA does include lifecycle GHG emission reduction benchmarks as a way to reward lower emitting fuels with additional points we recommend: 1) Relying on already established regulations instead of creating a new set of regulations for those calculations (i.e. EPA RFS) and 2) Not complicating the program with multiple threshold levels that USDA will need to create and monitor, but simply create rate for advanced biofuels that meet the RFS lifecycle GHG emission reduction requirements. Also, we urge USDA to make sure the program is flexible so that a producer can reapply in order to meet the higher criteria for the same project as it evolves.

Rates Calculated Based on BTU

The Agency is proposing to convert all production into the common measure of British Thermal

Units (BTU). The Agency believes that this is a reasonable methodology for comparing biofuels and treats all eligible advanced biofuels and their producers fairly and equally.

While the mechanism to develop a per BTU payment structure is sound, we do not feel that all BTU's are created equal. Providing an equivalent BTU payment for woody biomass and liquid fuels products puts liquid fuels at a disadvantage. For example, the fuel pellet industry has already reached a level of commercial maturity that far surpasses the advanced liquid fuel industry. We feel this program should place priority on enabling early adopters in the advanced liquid fuel sector. Such priority may help the sector attract additional investment and provide for growth in the industry. Having an equivalent BTU payment dilutes the funding pool for liquid fuel producers and provides incentives for 'business as usual' in the fuel pellet space. Placing priority on liquid fuels also helps solve the very important public policy issue of filling the advanced biofuel carve-out in RFS. The rules as written establish clear restrictions on liquid fuel producers, but not solid or gaseous fuel producers. As such we assume that all eligible solid fuel producers (ie: wood pellets) will draw from the same pool of funding as the "small" liquid fuel producer (less than 150 mgpy). Up against a mature industry, the predominance of funding will be allocated to solid fuel production and do little to enable advanced liquid fuels. The capital costs and conversion costs for liquid fuels are significantly higher than that of solid fuels. When comparing fuel pellet costs to corn ethanol costs (the cheapest comparison possible and any eligible advanced liquid fuel will certainly cost more than corn ethanol), capital costs are 4-5 times higher per BTU for liquid, and operational costs are 2-3 times higher. Payment ratios should have some proportion to investment and should favor liquid fuels that displace imported fuel feedstocks.

For these reasons, should USDA evaluate advanced biofuels applying for this program based on BTU content, they should evaluate BTU content against like fuel types only, ie liquid fuels against liquid fuels, solid fuels against solid fuels and gaseous fuels against other gaseous fuels.

In addition, BIO again encourages USDA to keep the final rule for this program as simple and streamlined as possible. I have included our opinions that were submitted to EPA during the RFS rulemaking process surrounding equivalency values on energy content of liquid biofuels below.

> *BIO supports EPA's approach on basing the equivalency values on the energy content and renewable content of each renewable liquid fuel in comparison to denatured ethanol, consistent with the approach under RFS1. This would be consistent with other approaches such as non-liquid renewable fuels (biogas and renewable electricity) which continue to be valued based on the energy contained in one gallon of denatured ethanol and would not be changed under EISA. A straight volume approach would create a disincentive for the development of new renewable fuels that have higher energy content than ethanol because of the higher cost to incorporate more carbon into your base molecule. The use of energy-based equivalence values could thus provide a level playing field in terms of the RFS2 program's incentives to produce different types of renewable fuel from the available feedstocks. We agree that the existence of four standards under RFS2 does not obviate the value of standardizing for energy content, which provides a level playing field under RFS1 for various types of renewable fuels based on energy content.*

Recommendation: Should USDA evaluate advanced biofuels applying for this program based on BTU content, they should evaluate BTU content against like fuel types only, ie liquid fuels against liquid fuels, solid fuels against solid fuels and gaseous fuels against other gaseous fuels.

USDA should keep the final rule for this program as simple and streamlined as possible and place priority on liquid fuels as a non-mature industry that displaces imported fuel feedstocks.

Citizenship of Applicant

The citizenship status of the applicant should not be an eligibility requirement of a facility as it has no effect on the program goal of replacing fossil fuels with energy derived from renewable biomass for the operation of biorefineries. As stated above, these facilities use U.S. feedstocks and employ U.S. workers. Therefore, the ability for a biorefinery to provide substantial local economic development opportunities is directly related to the location of the facility. Also, as stated above, the rural economic development potential resulting from the local construction and operation of a biorefinery is substantial.

Recommendation: BIO strongly recommends that USDA eliminate the 51% U.S. citizen ownership requirement in this program.

Conclusion

In conclusion, BIO commends the USDA for streamlining and accelerating programs such as the Bioenergy Program to assist in the commercialization of advanced biofuels technologies. We thank you for your consideration of these comments.

Sincerely,

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