

# DCG Public Affairs, LLC

**To:** Energy and Commerce Committee RFS Review – Agricultural Impacts

**From:** Dennis Griesing, Principal

**Date:** April 29, 2013

**Re:** RFS Impact on Domestic Oleochemical Industry – Cost of “Animal Fats”

## Introduction & Overview:

The following comments are submitted on behalf of the oleochemical members of The American Cleaning Institute® (ACI), the trade association representing the \$30 billion U.S. cleaning products market. ACI members include the formulators of soaps, detergents, and general cleaning products used in household, commercial, industrial and institutional settings as well as companies that supply ingredients and finished packaging. ACI and its members are dedicated to improving health and the quality of life through sustainable cleaning products and practices, and its mission is to support the sustainability of the cleaning products industry through research, education, outreach and science-based advocacy.

The following briefly outline the background on the industry and policy issues; the economic and jobs impact of problematic U.S. energy policies; and, requested relief via a policy change.

## Industry Background and Policy Issues:

The ACI welcomes the opportunity to present comments related to the impact of the RFS2 on agricultural sectors on behalf of its oleochemical-manufacturing members. Domestic oleochemical manufacturers are historic users of “animal fats,” an agricultural commodity. Oleochemicals are chemicals made from animal fats and seed oils including fatty alcohols and fatty acids that have wide ingredient application in industrial and consumer products. Oleochemicals are the original “green chemistry” and the domestic oleochemical industry provides direct and indirect employment for an estimated 25,000 people. Oleochemical plants provide union, breadwinner jobs represented by the United Commercial and Food Workers, reflecting the industry’s origins in the stockyards of the Mid West, as well as the United Steelworkers Union.

The price of animal fats, a co-product of livestock slaughter, has been significantly impacted by the RFS2 in its establishment of guaranteed markets for categories of biofuels fuels. “Animal fats” provide raw material for traditional biodiesel as well as advanced biofuels. “Animal fats are considered “biomass” for purposes of the RFS2. Oleochemicals have standing in this review because they share a raw material base, i.e., animal fats, with biodiesel and other biofuels.

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Until 2004, the animal fats market was free and open driven by supply and demand. Since then, biofuel producers have received raw material subsidies of \$1/gal through tax credits as well as guaranteed markets via the Revised Renewable Fuel Standards (RFS2). Oleochemical producers, to their detriment, receive no such government supports, and as discussed above, they must now compete for raw material against a government-subsidized industry. Raw material prices have more than doubled since 2004. As of April 29, Bleached Fine Tallow was trading at \$0.4225 lb. Paradoxically, at current tallow prices, it takes 348.6 lbs. of tallow, at a cost of \$148, to make a barrel of biodiesel. At the same time, a barrel of West Texas Intermediate crude is \$93 - a \$55 difference."

"Animal fats" differ from other biofuel raw materials in that the supply is inelastic. Other cultivated commodities, e.g., soybeans and corn, have the option of increased cultivation in order to offset the higher prices created by biofuel demand. This option is not available for "animal fats" because they are a "co-product" rather than the primary commodity.

A co-product is a derivative of another commodity. In this case, the primary commodity is meat. Cattle are not raised for their fat; they are raised for their meat. As a result, "animal fats" production is driven by meat consumption rather than biofuel demand despite the fact that "animal fats" are increasingly used as a biofuel raw material. The consequence is a commodity price driven upward by government policies resulting in increased demand but without the traditional offsetting capability of increasing supply.

Animal fats provide oleochemical producers a competitive raw material base against foreign palm oil alternatives. If animal fats prices lose their competitive edge, the domestic industry stands to be lost to offshore, foreign competitors. Absent relief, market economics will first drive oleochemical production offshore to be followed by related finished product production.

"Animal fats are also falsely portrayed as "waste." They are the lifeblood of the domestic oleochemical industry and have historical, well-established uses in other applications as well, including animal feed.

According to the United States Department of Agriculture's (USDA) Agricultural Marketing Service, inedible tallow traded at \$1,097 metric ton in April 2012, up 34% since 2010. The National Renderers Association (Renderers) estimates that 30% of animal fats goes to biodiesel production. In 2011 they report that domestic production of biodiesel was 1.1 billion gallons, a 200% increase over 2010. This is significant in that the tax credit for biodiesel production was suspended for most of 2010. While the tax credit is not the issue before the Committee in this review, it is illustrative of the impacts of government policy on the biofuels market.

Three documents are appended. Appendix A is draft legislation to restore an open and competitive for animal fats. Appendix B is ACI's is an analysis of the RFS' impact on oleochemical producers submitted to the Environmental Protection Agency in 2011. Appendix C is a more detailed position paper on the issue.

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Summary and Policy Recommendation:

For the foregoing reasons, ACI respectfully urges that “animal fats” be eliminated as a qualifying commodity under the RFS2. This policy change would serve to eliminate the disadvantage currently imposed on oleochemical producers and return the “animal fats” market to its free market origins. “Animal fats” could continue to be used by biofuel producers outside of the RFS2 framework, nevertheless.

Respectfully submitted,

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Encl.

## Textual Analysis of the Proposed Amendment to Exempt Animal Fats from National Tax Credit and Standards Programs

The proposed amendment would make changes to three statutory provisions relating to federal government policy on renewable energy, two of which provide tax credits for renewable fuels and the other that establishes national renewable fuel standards. Each of the three changes in the amendment would simply exempt fuels derived from animal fats from the application of the credits or the standard. In short, such fuels would not get to take advantage of the tax credits, and biofuel sellers would not be required to use such fuels to meet the standards. The effect of the amendments will be to re-establish a competitive open market for the marketing of the extremely inelastic supplies of animal fats. The amendment would have no adverse effect on the use of expandable agricultural crops to provide feed stocks for biodiesel production. Biofuel producers could continue to purchase animal fats in the reestablished competitive, free and open market.

Subsection (a) of the amendment would amend section 40A of the Internal Revenue Code of 1986 (26 U.S.C. 40A), which provides a \$1 per gallon tax credit on the sale of biodiesel, and a 10 cents per gallon credit to small producers of agri-biodiesel (which is defined as diesel derived from virgin plant oils and animal fats).

Subsection (a) would amend the definition of "biodiesel," as used in the section 40A, by adding a caveat at the end of the definition that the term does not include biodiesel derived solely or partially from animal fats. The effect of this change is to bar the granting of the biodiesel tax credit to such biodiesel derived from animal fats.

Subsection (a) would also amend the definition of "agri-biodiesel," as used in the section, by deleting that part of the definition that states that the term means biodiesel derived from animal fats. The effect of this change similarly will bar the granting of the agri-biodiesel tax credit to animal fats-based biodiesel.

Subsection (b) of the amendment would amend section 6426 of the Code (26 U.S.C. 6426), which provides an excise tax credit for renewable fuels, including biodiesel and "alternative fuel" mixtures. With respect to the former—that is, biodiesel—animal fats-based biodiesel would be excluded from the excise tax credit by operation of the change made by subsection (a) of the amendment. This is because paragraph (5) of subsection (c) of section 6426 (which subsection establishes the credit for biodiesel mixtures) provides that, for purposes of the subsection, the terms used therein have the meaning given them in section 40A of the Code.

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What subsection (b) does is address the inclusion of animal fats-based liquid fuel in the definition of "alternative fuel" also eligible for an excise tax credit by amending subsection (d) of section 6426, which establishes the alternative fuel credit.

An Internal Revenue Service notice issued in 2007 (Notice 2007-97) states that the term "alternative fuel" includes liquids derived from rendered fat. Under this notice, then, if the animal fats-based liquid fuel is not biodiesel (subsection (d)(1) of section 6426 excludes biodiesel from the definition of "alternative fuel"), the alternative fuel is eligible for the credit. The amendment will revise the definition of "alternative fuel" for purposes of the credit to exclude any liquid fuel derived from animal fat. This change will prevent the award of the excise tax credit for such animal fats-based fuel.

Subsection (c) of the amendment would amend subsection (o) of section 211 of the Clean Air Act (42 U.S.C. 7545), which establishes renewable fuel standards. The current renewable fuel standards are a revision made in 2007 of standards established earlier, and are known by the acronym "RFS2."

Under the RFS2, all biofuels marketed in the United States annually must cumulatively contain the following volumes of biomass-based biodiesel: in 2009, 500 million gallons; in 2010, 650 million gallons; in 2011, 800 million gallons; and in 2012, 1 billion gallons.

Subsection (o) of section 211 defines "biomass-based diesel" to mean renewable fuel that is biodiesel; it defines "renewable fuel" to mean fuel that is produced from renewable biomass; and it defines "renewable biomass" to include "animal waste material and animal byproducts."

The amendment made by subsection (c) would limit the term "animal byproducts" to those byproducts that have no commercial value. The effect of this change is to exclude from the term animal fats used in commerce; and in turn the effect of revised term would be that animal fats would not be considered renewable biomass. With that, biomass-based diesel made from animal fats would not be part of the RFS2.

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## An Amendment

To exempt animal fats from national renewable energy tax credit and standards programs to ensure that commercial users of these valuable products for purposes other than production of fuel have free-market access to them.

Viz., at the end of the bill insert the following new section:

**"SEC. \_\_\_\_.** **EXEMPTION OF ANIMAL FATS FROM NATIONAL RENEWABLE  
ENERGY TAX CREDIT AND STANDARDS PROGRAMS.**

"(a) **TAX CREDITS FOR BIODIESEL AND RENEWABLE DIESEL USED AS FUEL.**—Subsection (d) of section 40A of the Internal Revenue Code of 1986 (26 U.S.C. 40A) is amended by—

"(1) in paragraph (1), adding before the period at the end the following: 'nor biodiesel derived solely or partially from animal fats'; and

"(2) in paragraph (2), striking ', and from animal fats'.

"(b) **VOLUMETRIC EXCISE TAX CREDIT FOR ALTERNATIVE FUELS.**—Subsection (d)(2)(G) of section 6426 of the Internal Revenue Code of 1986 (26 U.S.C. 6424) is amended by inserting before the period at the end the following: ' except for liquid fuel derived from animal fat'.

"(c) **RENEWABLE FUEL STANDARDS.**—Subsection (o)(1)(I)(iii) of section 211 of the Clean Air Act (42 U.S.C. 7545) is amended by inserting 'otherwise non-merchantable' before 'animal byproducts'."

**VIA ELECTRONIC SUBMISSION**

August 11, 2011

Environmental Protection Agency  
Air and Radiation Docket and Information Center  
Environmental Protection Agency  
Mailcode: 2822T  
1200 Pennsylvania Avenue, NW  
Washington, D.C. 20460

RE: Regulation of Fuels and Fuel Additives: 2012 Renewable Fuel Standards:  
Docket ID No. EPA-HQ-OAR-2010-0133

The American Cleaning Institute<sup>®</sup> (ACI, formerly The Soap and Detergent Association, SDA) represents the \$30 billion U.S. cleaning products market and includes the formulators of soaps, detergents, and general cleaning products used in household, commercial, industrial and institutional settings; companies that supply ingredients and finished packaging for these products; and oleochemical producers.

We appreciate the opportunity to provide comments on the proposed 2012 Renewable Fuel Standards and the volume requirements for biomass-based diesel in 2013 and beyond. As outlined below, ACI has serious concerns regarding the 2012 Renewable Fuel Standards and 2013 biomass-based diesel volume mandate. The proposal will have a serious and significant impact on ACI member companies' ability to source animal fats for use as an oleochemical feedstock. We respectfully request that EPA use its discretionary authority to lower, rather than raise the volume requirements for biomass-based diesel and advanced biofuel, or, alternatively, to exclude animal fats as a feedstock option. The proposed volumes would divert even larger quantities of a finite inelastic supply of animal fats to the biofuels market, thereby critically disadvantaging the domestic oleochemical industry.

Combined government policies have driven the price of tallow above that of palm oil for the first time in history. More importantly, the proposed rule, with its higher volumes, now threatens the availability of animal fats for use in oleochemicals. Unless these government policies are reversed, the domestic oleochemical industry stands to be driven offshore to Southeast Asia to be near its new raw material source, i.e. palm oil. While it is somewhat difficult to tease out industry specific numbers from the Standard Industry Codes (SIC) or Dunn and Bradstreet, our best estimate is that the oleochemical industry currently directly supports 20,000 breadwinner jobs in the United States.

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## Executive Summary

- The price of animal fats has dramatically increased under the combined policies of the RFS2 and tax incentives for biofuels
- Biofuel production consumes a significant amount of the total supply of animal fats and current policies threaten not only the price but the availability of animal fats for oleochemical production
- For the first time in history, the price of animal fats now exceeds that of Malaysian palm oil
- Switching to palm oil by the oleochemical industry threatens 20,000 U.S. jobs
- EPA must use all its available discretion to exempt or minimize the use of animal fats under the RFS2 mandates and include the Proposed Rule's impact on the oleochemical industry in its analysis of impacts on other sectors and industries. The EPA must address the potential job loss in collateral industries (Section IV. A of Proposed Rule)
- The use of animal fats to make biodiesel could consume a given year's total supply of animal fat
- Agency mandates should not choose winners and losers. EPA has a responsibility, if not duty, to equally protect all industries that rely on animal fats to produce goods

## Market Conditions under 1.0 billion gallon mandate

Since the adoption of federal policies encouraging the use of animal fats as a biofuels feedstock, the price of animal fats has increased significantly. The average yearly price of animal fats (BFT Delivered Chicago) has, as the table below shows, increased from \$0.19 in 2006 to \$0.44 in 2011.<sup>1</sup>

Table 1.

Average Yearly Price	BFT - Delivered Chicago	Price Change (year to year)	Percent Change (year to year)
2006	\$0.19	N/A	N/A

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<sup>1</sup> The Jacobsen; 2011 data is 6 month average (January through June 2011).



2007	\$0.28	\$0.09	50.5%
2008	\$0.34	\$0.06	23.2%
2009	\$0.25	-\$0.09	-26.6%
2010	\$0.33	\$0.08	32.6%
2011 (Jan-June)	\$0.44	\$0.11	32.4%

Source: The Jacobsen

During this same period (2006-2010) domestic production of rendered products has generally trended downward from a 2006 level of 4,534.9 metric tons to 4,264.5 metric tons in 2010, a reduction of 270.4 metric tons.<sup>2</sup> Unlike other commodity markets, where higher prices lead to greater supply, animal fats operate in an inelastic market.

Table 2.

U.S. Production of Rendered Products (000 Metric Tons)	2006	2007	2008	2009	2010
<b>Inedible tallow and greases (total):</b>	2963.8	3006.5	2880.8	2821.5	2668.1
<b>Inedible tallow</b>	1737.8	1727.5	1610.7	1531.1	1511.2
<b>Greases</b>	1226.0	1279.0	1270.1	1290.3	1156.9
<b>Yellow grease</b>	671.4	700.0	769.1	740.3	569.2
<b>Other grease</b>	554.6	579.0	501.1	550.0	588.3
<b>Edible tallow</b>	844.3	811.4	813.7	833.4	827.6
<b>Lard</b>	143.8	211.2	222.6	157.0	130.4
<b>Poultry fat</b>	583.0	624.8	659.3	625.4	638.3
<b>Subtotal</b>	<b>4534.9</b>	<b>4653.9</b>	<b>4576.4</b>	<b>4437.3</b>	<b>4264.5</b>
<b>Year to Year Difference</b>	N/A	<b>119.00</b>	<b>-77.50</b>	<b>-139.10</b>	<b>-172.80</b>
<b>Percent of Supply Change</b>	N/A	<b>2.56</b>	<b>-1.69</b>	<b>-3.13</b>	<b>-4.05</b>

Source: Render Magazine, April 2009 and April 2011

### The supply of animal fats is inelastic.

At the same time that the RFS2 mandates have been implemented for biomass-based diesel, the supply of animal fats has fallen 8.3% from 2007-2010. The decline stems from many factors, including an economic downturn that caused consumers to decrease their consumption of beef products. Livestock owners also decreased their herds as the cost of production increased due to higher feed prices, driven in part by corn ethanol. This has led to fewer animals being brought to market. Livestock production is geared to food supply, not fuel. Animal fats are a co-product of livestock slaughter, not a demand driver. Consequently, there is no reasonable prospect that production will increase significantly, farmers and ranchers do not raise or slaughter animals for their fats.

<sup>2</sup> Render Magazine, April 2009 and April 2011

Historically, animal fats have provided domestic oleochemical producers a competitive raw material cost advantage over foreign-sourced palm. As a result of the RFS2 mandates as well as tax credits that support diversion of animal fats to biofuel production, that raw material price advantage has now been lost for the first time (see Graph 1). Oleochemicals are the original “green” chemistry. They are used in a wide range of value-added household and industrial products. In view of this history, any characterization of animal fats as “waste” is false. Waste implies something that does not otherwise have a value. This is not the case with animal fats. Papers of record, such as the *Wall Street Journal* and *New York Times*, list the commodity prices of the various animal fats used for production in hundreds of products. These prices are also collected and published by private firms such as ICIS-LOR and The Jacobsen Letter.

### Supply shortages lead to raw material price increases.

As noted above, in 2011 the price of tallow has increased \$0.11 to \$0.44 from an already high price of \$0.33 in 2010.<sup>3</sup>

Table 3.

Average Yearly Price	BFT - Delivered Chicago	Soyoil Crude Degummed - Illinois	BFT - Soyoil Crude Degummed	Technical Tallow (Cents/Lb)	Palm Stearin FOB Malaysia (Cents/Lb)	Technical Tallow - Palm Stearin
<b>2006</b>	\$0.19	\$0.27	<b>-\$0.09</b>	\$0.19	\$0.20	<b>-\$0.01</b>
<b>2007</b>	\$0.28	\$0.35	<b>-\$0.08</b>	\$0.29	\$0.33	<b>-\$0.03</b>
<b>2008</b>	\$0.34	\$0.50	<b>-\$0.16</b>	\$0.37	\$0.37	<b>\$0.00</b>
<b>2009</b>	\$0.25	\$0.33	<b>-\$0.08</b>	\$0.28	\$0.28	<b>\$0.00</b>
<b>2010</b>	\$0.33	\$0.39	<b>-\$0.06</b>	\$0.36	\$0.39	<b>-\$0.03</b>
<b>2011 (Jan-June)</b>	\$0.44	\$0.50	<b>-\$0.06</b>	\$0.53	\$0.49	<b>\$0.04</b>

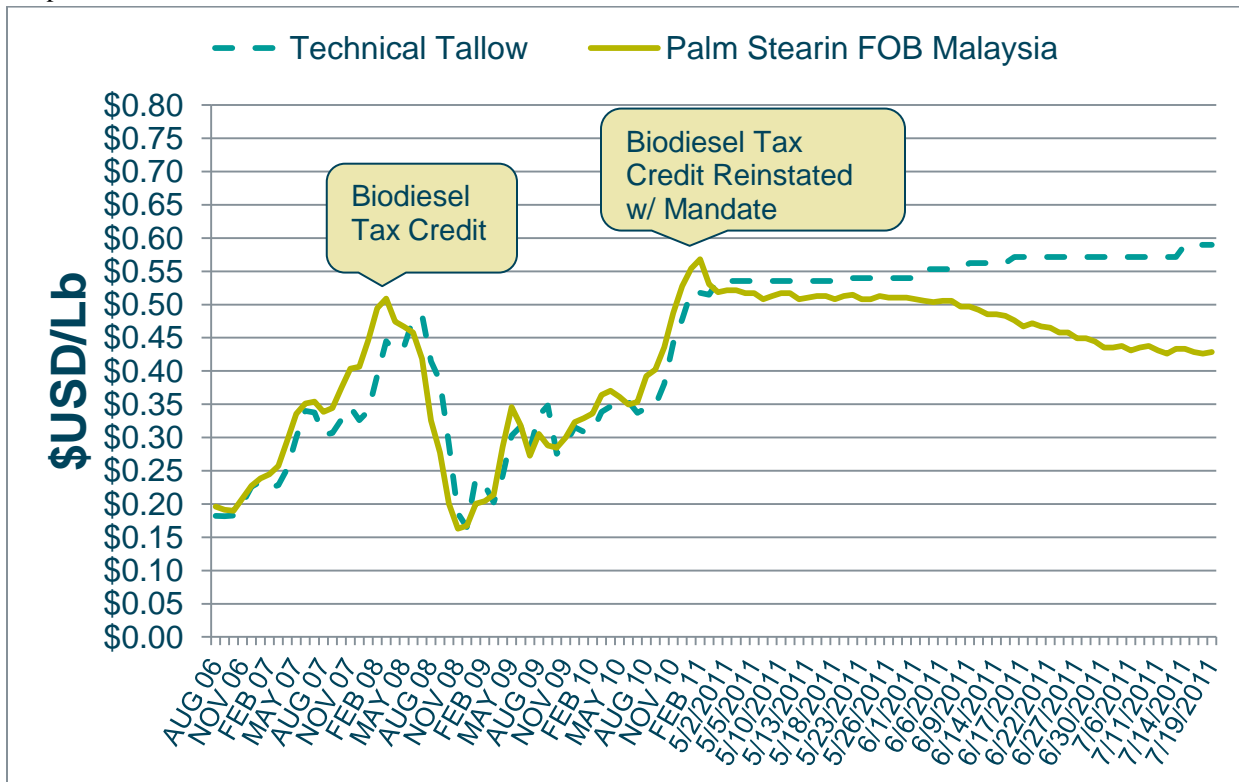
Source: The Jacobsen

The effect the RFS2 mandate and the \$1.00 per gallon biodiesel and renewable diesel tax credits have had on the prices for animal fats and palm oil is shown in the table above and more dramatically on the graph below. A guaranteed market combined with a tax credit, has made the price of Malaysian palm oil cheaper than animal fats i.e. technical tallow, for the first time. This foreign material source has become less expensive, thus making it an attractive alternative in product formulation. The price difference is a direct result of policies that have been created to entice and encourage the production of biodiesel and renewable diesel, at the expense of the domestic oleochemical industry.<sup>4</sup> The fact is that the higher prices caused by increased demand for animal fats cannot be offset by increased supply. This is the inelastic economic dilemma for oleochemical manufacturers.

<sup>3</sup> Source: The Jacobsen

<sup>4</sup> Ibid.

Graph 1.



Source: The Jacobsen

The domestic oleochemical industry has traditionally maintained its production facilities near its raw material source. When these producers switch to a foreign-sourced palm oil, it will likely cause them to move their production facilities offshore. Should the switch from animal fats to palm oil occur, 20,000 jobs stand to be lost, further exasperating current economic conditions.

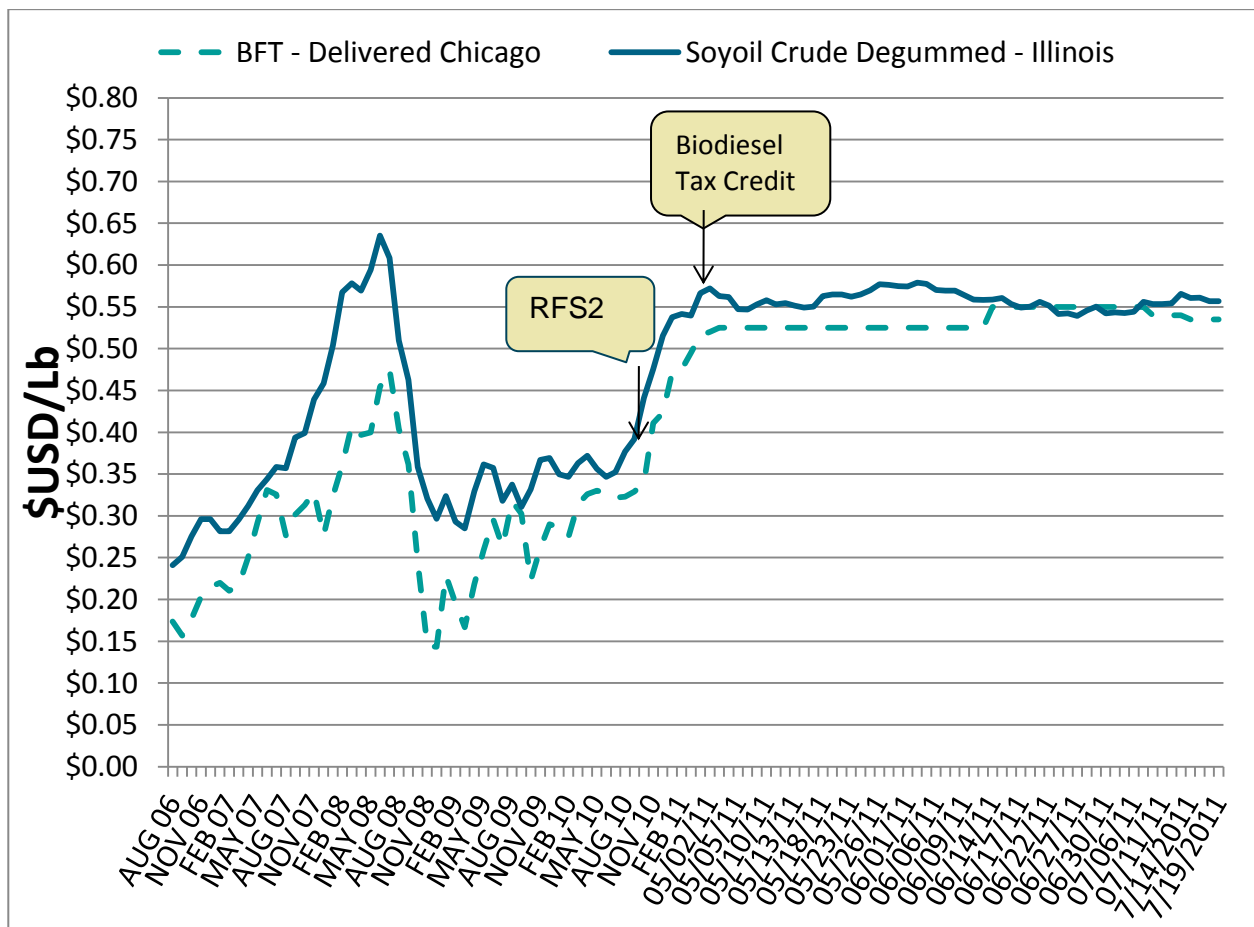
### Animal Fats vs. Soyoil

With respect to biodiesel production, soyoil is a more expensive feedstock option than animal fats. This is shown above in table 3 and on graph 2.<sup>5</sup> Initially, many biodiesel facilities were built to operate using only one feedstock, e.g., soyoil. However, to provide more flexibility and the ability to use cheaper animal fats, many biodiesel producers now have multiple material facilities that can use either soy and animal fats.

Under the RFS2, there is no mechanism or trigger that limits the amount of animal fats that can be used as a biofuels feedstock. The proposed rule references information received from a large rendering company

<sup>5</sup> Source: Ibid

“suggesting that there will be adequate fats and greases to supply biofuels production as well as other historical uses.” (pg. 38857) Yet, at the same time, the proposed rule references projections by the Department of Agriculture that “while over 400 million gallons of biodiesel will be produced from soybean oil in 2010”, most of the remaining needed to meet the 1 billion gallon mandate will use animal fats or recycled greases. (pg. 38856) Further, the Agriculture Marketing Resource Center at Iowa State University projects more growth in non-soy oil feedstock volumes than soy oil. (pg. 38856) EPA also anticipates renewable diesel contributing toward the requirements for biomass-based diesel, which will intensify the pressures placed on the animal fats supply. As the following demonstrates, animal fats prices have risen with soyoil and their use continues to be advantageous for biodiesel producers.



The market conditions outlined earlier do not take into account the effect the proposed 2012 requirement of 1.0 billion gallons or the 2013 proposed requirement of 1.28 billion gallons will have on the cost and availability of animal fats. Of further concern is EPA's proposed decision not to lower the advanced fuel mandate, based on the premise that biomass-based diesel, renewable diesel and other biofuels could fill the gap.

In 2009, when the Statute called for 0.5 billion gallons of biomass-based diesel, the Energy Information Administration (EIA) reported that 1.04 billion pounds of animal fats were used as inputs to biodiesel production.<sup>7</sup> Those 1.04 billion pounds of animal fats created approximately 186,666,667 gallons of biodiesel.<sup>8</sup> Total production of rendered products for that year was 4,437.3 (000 Metric Tons) or 9,782,571,951.73 pounds.<sup>9</sup>

10.6% of the supply of rendered products was used to produce 2009's biodiesel fuel.<sup>10</sup> There is nothing in EISA or the proposed rule that limits the amount of animal fats that can be used to meet the mandate. The usage of animal fats could range up to 100%. With no mechanism to limit the usage amount of any feedstock, had 100% of the 0.5 billion gallons been met through animal fats, 3.75 billion pounds of animal fats would have been used, taking 38% of all animal fats out of the market place.

Table 4.

<b>U.S. Production of Rendered Products (000 Metric Tons)</b>	<b>2009</b>	<b>2010</b>
<b>Inedible tallow and greases (total):</b>	2821.5	2668.1
<b>Inedible tallow</b>		1531.1
<b>Greases</b>		1290.3
<b>Yellow grease</b>	740.3	569.2
<b>Other grease</b>	550.0	588.3
<b>Edible tallow</b>	833.4	827.6
<b>Lard</b>	157.0	130.4
<b>Poultry fat</b>	625.4	638.3
<b>Subtotal</b>	<b>4437.3</b>	<b>4264.5</b>
<b>Year to Year Difference</b>	<b>-139.10</b>	<b>-172.80</b>
<b>Percent of Supply Change</b>	<b>-3.13</b>	<b>-4.05</b>

Source: Render Magazine, April 2011

Table 5.

	<b>2009</b>	<b>2010</b>

<sup>7</sup> U.S. Energy Information Administration/Monthly Biodiesel Production Report, Table 3. Inputs to Biodiesel Production, January through December 2009.

<sup>8</sup> 7.5 pounds of animal fats create 1 gallon of biodiesel. Collins, Hal. Soil Scientist/Microbiologist, Vegetable and Forage Research Unit USDA-ARS

<sup>9</sup> 1 metric tons = 2,204.62262 pounds; 4,437.3 Metric Tons (000) = 4,437,300 x 2,204.62262 = 9,782,571,951.726 pounds.

<sup>10</sup> 1.04 billion pounds used/9.78 billion pounds total productionx100=10.6% of 2009 production of rendered products.

<b>U.S. Production of Rendered Products (Pounds)</b>		
<b>Inedible tallow and greases (total):</b>	6,220,342,722.33	5,882,153,612.42
<b>Inedible tallow</b>	3,375,497,693.48	3,331,625,703.34
<b>Greases</b>	2,844,624,566.59	2,550,527,909.08
<b>Yellow grease</b>	1,632,082,125.59	1,254,871,195.30
<b>Other grease</b>	1,212,542,441.00	1,296,979,487.35
<b>Edible tallow</b>	1,837,332,491.51	1,824,545,680.31
<b>Lard</b>	346,125,751.34	287,482,789.65
<b>Poultry fat</b>	1,378,770,986.55	1,407,210,618.35
<b>Subtotal</b>	<b>9,782,571,951.73</b>	<b>9,401,613,162.99</b>
<b>Year to Year Difference</b>	<b>-306,663,006.44</b>	<b>-380,958,788.74</b>
<b>Percent of Supply Change</b>	<b>-3.13</b>	<b>-4.05</b>

Source: Render Magazine, April 2011

In 2010 the production of biomass-base diesel requirement increased to 0.65 billion gallons. Using the same assumptions and calculations, 4.875 billion pounds of animal fats could have been consumed for biodiesel, equaling nearly 52% of that year's total supply of rendered fats.

The 2013 volume of 1.28 billion gallons is expected to be met through the use of 2.85 billion pounds of animal fat. This represents 30% of the entire mandate and is also 30% of the entire production of animal fats in 2010.<sup>11</sup>

Table IV.B.2-1

Feedstocks Contributing to 2013 Volume of 1.28 billion gallons

<b>Source</b>	<b>Volume (gal)</b>	<b>Potential Pounds Tallow</b>
Yellow grease and other rendered fats	380,000,000	2,850,000,000 (30% of mandate)
Corn oil	300,000,000	
Virgin vegetable oil	600,000,000	
<b>Total</b>	<b>1,280,000,000</b>	<b>9,600,000,000 (100% of mandate)</b>

Source: EPA Regulation of Fuels and Fuel Additives: 2012 Renewable Fuel Standards

When using the IHS Global Insight Modeling, 20% of the mandate depends on 2.04 billion pounds of animal fats and an additional 1.387 billion pounds could be used to achieve 1.3 billion gallons, a potential total of 3.427 billion pounds, which would equal 36% of the entire production of animal fats in 2010.<sup>12</sup>

Table IV.B.2-2

Feedstocks Contributing to 2013 Volume of 1.3 bill gal from IHS Global Insight Modeling

<sup>11</sup> 30% feedstocks = 2.85 billion pounds used/9.4 billion pounds total production (2010)x100.

<sup>12</sup> 36% feedstocks = 3.427 billion pounds used/9.4 billion pounds total production (2010)x100.

Source	Volume (gal)	Potential Pounds Tallow
Yellow grease and other rendered fats	272,000,000	2,040,000,000 (20% of mandate)
Corn oil	185,000,000	
Soybean oil	624,000,000	
Canola oil	68,000,000	
Palm oil	7,000,000	
Other	185,000,000	1,387,500,000 (13% of mandate)
Total	1,340,000,000	10,050,000,000 (100% of mandate)

Source: EPA Regulation of Fuels and Fuel Additives: 2012 Renewable Fuel Standards

Using these models, 30 and 36% of total production of animal fats shows the dramatic increase the RFS2 mandate has had on the supply of animal fats from 2009 when 10.6% of the total production was used.

Table IV.E-1 in the proposed rule provides projections of biomass-based diesel after 2012 (bill gallons). Below is a copy of that table and the potential impact these mandated fuel amount would have on the supply of animal fats.

Table IV.E-1  
**Projections of biomass-based diesel after 2012 (gallons)**

Year	RFS2 Final Rule	Potential Pounds Tallow	IHS Global Insight Report	Potential Pounds Tallow
2013	1,280,000,000	9,600,000,000	1,340,000,000	10,050,000,000
2014	1,390,000,000	10,425,000,000	1,500,000,000	11,250,000,000
2015	1,530,000,000	11,475,000,000	1,810,000,000	13,575,000,000
2016	1,560,000,000	11,700,000,000	2,180,000,000	16,350,000,000
2017	1,600,000,000	12,000,000,000	2,530,000,000	18,975,000,000
2018	1,640,000,000	12,300,000,000	2,740,000,000	20,550,000,000
2019	1,680,000,000	12,600,000,000	3,000,000,000	22,500,000,000
2020	1,720,000,000	12,900,000,000	3,140,000,000	23,550,000,000
2021	1,770,000,000	13,275,000,000	3,230,000,000	24,225,000,000
2022	1,820,000,000	13,650,000,000	3,300,000,000	24,750,000,000

Source: EPA Regulation of Fuels and Fuel Additives: 2012 Renewable Fuel Standards

In 2009 1.040 billion pounds of animal fats were used to help meet that year's 0.5 billion gallon mandate. A mandate of 1.72 billion gallons could use anywhere from 3.536 billion to 12.9 billion pounds of animal fats.<sup>13</sup> The conservative estimate of 3.536 billion pounds assumes that the percentage animal fats used in the production of biofuels remains at that 2009 level.

If the 2013 biodiesel mandate was in effect in 2009, the 3.536 billion pounds of animal fats would equal 36% of that year's supply of rendered products. If the same mandate were in effect in 2010, it would have used 38% of that year's total supply.

Should Biomass-Based Biodiesel producers use only animal fats, the demand would greatly exceed the supply of that material. The use of only animal fats would mean 12.9 billion pounds of animal fats went into the production of biofuels, which is 3.2 billion more pounds than the total U.S. production of rendered products in 2009 and 3.5 billion pounds more than were produced in 2010. Without a mechanism that prevents the mandate to be filled from biodiesel solely produced from animal fats, the total animal fats supply could be completely consumed by biofuel producers.

### **2013 call for 30% and 36% of biofuels to come from animal fats**

The 2013 projection of feedstocks that would be needed to meet that year's 1.28 billion gallon mandate relied on 30% of the total to be derived from animal fats. That increases to 36% using the IHS Global Insights Report. If that occurs, 38% of the animal fats supply would go to the production of biodiesel and should other feedstocks fall short, 100% of the total supply of animal fats could be used to make up the difference.

Table IV.E: Projections of biomass-based diesel after 2012 (gallons)

#### **EPA Modeling**

	<b>RFS 2 Final Rule</b>	<b>Potential Pounds Tallow</b>	<b>30% usage of animal fats modeling from 2013 projections</b>	<b>Potential Pounds Tallow</b>
2013	1,280,000,000	9,600,000,000	384,000,000	2,880,000,000
2014	1,390,000,000	10,425,000,000	417,000,000	3,127,500,000
2015	1,530,000,000	11,475,000,000	459,000,000	3,442,500,000
2016	1,560,000,000	11,700,000,000	468,000,000	3,510,000,000
2017	1,600,000,000	12,000,000,000	480,000,000	3,600,000,000
2018	1,640,000,000	12,300,000,000	492,000,000	3,690,000,000

<sup>13</sup> 3.536 billion = 17.2/0.5 = 3.4; 3.4 \* 1,040,000,000 pounds (2009 usage) = 3,536,000,000



2019	1,680,000,000	12,600,000,000	504,000,000	3,780,000,000
2020	1,720,000,000	12,900,000,000	516,000,000	3,870,000,000
2021	1,770,000,000	13,275,000,000	531,000,000	3,982,500,000
2022	1,820,000,000	13,650,000,000	546,000,000	4,095,000,000

Source: EPA Regulation of Fuels and Fuel Additives: 2012 Renewable Fuel Standards

Table IV.E-1: Projections of biomass-based diesel after 2012 (gallons)

**IHS Global Insights Report Modeling**

	<b>RFS 2 Final Rule</b>	<b>IHS Global Insight Report</b>	<b>Potential Pounds Tallow</b>	<b>36% usage of animal fats modeling from 2013 projections</b>	<b>Potential Pounds Tallow</b>
2013	1,280,000,000	1,340,000,000	10,050,000,000	482,400,000	3,618,000,000
2014	1,390,000,000	1,500,000,000	11,250,000,000	540,000,000	4,050,000,000
2015	1,530,000,000	1,810,000,000	13,575,000,000	651,600,000	4,887,000,000
2016	1,560,000,000	2,180,000,000	16,350,000,000	784,800,000	5,886,000,000
2017	1,600,000,000	2,530,000,000	18,975,000,000	910,800,000	6,831,000,000
2018	1,640,000,000	2,740,000,000	20,550,000,000	986,400,000	7,398,000,000
2019	1,680,000,000	3,000,000,000	22,500,000,000	1,080,000,000	8,100,000,000
2020	1,720,000,000	3,140,000,000	23,550,000,000	1,130,400,000	8,478,000,000
2021	1,770,000,000	3,230,000,000	24,225,000,000	1,162,800,000	8,721,000,000
2022	1,820,000,000	3,300,000,000	24,750,000,000	1,188,000,000	8,910,000,000

Source: EPA Regulation of Fuels and Fuel Additives: 2012 Renewable Fuel Standards

**Discretion must be applied**

Long term usage and reliance on animal fats to produce biofuels is not viable. There simply is not enough production volume to meet the growing demand for biodiesel and there is little likelihood that the supply of animal fats will increase. Eventually biodiesel producers will have to use feedstocks other than animal fats. This inevitability should cause EPA to exclude their usage in 2012 and beyond to drive the use of more sustainable feedstock supplies. This would go a long way toward protecting the continued viability of the U.S.-based oleochemical industry. Without a consistent and adequate supply of animal fats as a feedstock for the production of oleochemicals, the industry will need to turn to other non-US sourced feedstocks, which over time could result in the US losing this industry.

EPA must use its discretionary authority to ensure adequate supply of these feedstocks for all industries, not just biofuels. EPA should limit the percentage of animal fat supply that can be used in the production of biofuels or eliminate animal fats as a feedstock option. It is unfair to place such a heavy burden on a source that is as inelastic as animal fats. By doing so, EPA is deciding which industry wins and which one loses. The domestic

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oleochemical industry has provided decades of economic strength and security. Consequently, we urge the EPA to maximize the use its discretion to limit, rather than expand the use of animal fats under the RFS2. The future of a longstanding domestic industry is at stake.

Respectfully submitted,

A handwritten signature in cursive script that reads "Dennis Griesing".

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## **Proposed Critical Amendments**

**To**

### **United States Biofuels Policy**

#### **To Preserve the United States' Oleochemical Industry**

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##### **Oleochemicals**

Oleochemicals are the original “green chemistry.” They are chemicals made from animal fats and seed oils, including fatty alcohols and fatty acids. Oleochemicals are used as ingredients in cleaning products as well as many other industrial and consumer products.

##### **Issue:**

Oleochemicals are impacted by federal biofuels policy because they share a raw material base, i.e., animal fats, with biodiesel and other biofuels. Until 2004, the animal fats market was free and open, driven by supply and demand. Since then, biofuels producers and others have received raw material subsidies of up to \$1/gal through tax credits as well as guaranteed markets via the Renewable Fuel Standards and its latest revisions (RFS2). Oleochemical producers, to their detriment, receive no such government supports. Oleochemical producers must now compete for raw material against a government-subsidized industry. Raw material prices have more than doubled since 2004.

Animal fats provide a competitive raw material base against foreign palm oil alternatives. If animal fats prices lose their competitive edge, the domestic industry stands to be lost to offshore, foreign competitors. Absent relief, market economics will first drive oleochemical production offshore to be followed by related finished product production. Animal fats are falsely portrayed as “waste.” They are the lifeblood of the domestic oleochemical industry and have historical, well-established uses in other applications as well, including animal feed.

While it is somewhat difficult to tease out industry specific numbers from the Standard Industry Codes (SIC) or Dunn and Bradstreet, our best estimate is that the oleochemical industry directly supports 20,000 jobs in the United States. Oleochemical plants provide union, breadwinner jobs represented by the United Commercial and Food Workers, reflecting the industry's origins in the stockyards of the Mid West, as well as the United Steelworkers Union.

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## **Remedy Sought**

Eliminate all tax credits related to the energy use of “animal fats” including the biodiesel tax credits, all other biofuel credits, e.g., renewable diesel, as well as the alternative fuel tax credit for direct burning. Eliminate animal fats–based biofuels from qualification under the RFS2.

## **Result of Proposed Amendments**

The market for animal fats would once again become free, open and competitive. Oleochemical and biofuels producers would purchase animal fats at competitive, open market prices. Oleochemical producers will no longer be in competition with their own government.

## **Background**

### Legislative History

Animal fats used for biodiesel, renewable diesel, advanced biofuels and renewable biomass fuels<sup>14</sup> are incentivized by the “American Jobs Creation Act of 2004” and other laws by tax credits of up to \$1/gal. Biodiesel markets are also guaranteed by the mandates contained in the Revised Renewable Fuel Standards (RFS2) established by the “Energy Independence and Security Act of 2007” (Public Law No. 110-140). The RFS2’s mandated markets compound the situation by allowing biofuels producers to purchase their raw materials at any price since they can charge what is necessary to cover their costs because the mandated volumes of the product must be purchased by blenders.

These two principal statutes have caused the price of tallow to effectively double over pre-incentive, historical prices. This poses a serious problem. The animal fats supply is inelastic, generally varying no more than 2% per annum. Livestock are not grown for their fat. Consequently, animal fats, as well as other non-food portions of the livestock, are known as “co-products” of the slaughter.

### Animal Fats are Not Waste

Animal fats have historically been used to a very high degree in various applications. Any characterization of animal fats as “waste” flies in the face of reality. Waste implies something that does not otherwise have a value. This is clearly not the case with animal fats. The Wall Street Journal and New York Times do not publish commodity prices for useless material. If you want to know the commodity prices for various grades of tallow or pork fat etc., you just have to open one of these or other papers of record. These prices are also the collected and published by private firms such as The Jacobsen Letter.

## **Proposed Remedies**

### Eliminate Animal Fats from Biofuels Excise Tax Credits

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<sup>14</sup> In some instances, the same animal fats-based biodiesel (methyl ester biodiesel) is referred to by different terms despite being the same product.

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This would have the effect of shifting all subsidies to expandable agricultural crops, e.g., soybeans. Animal fats prices would once again be determined by free market conditions as they were prior to 2004. The exemption should include the Alternative Fuel Tax as well as the biofuels excise tax credits.

#### Amend RFS2 Biofuel Mandate

The RFS2 threatens both supply and price. The mandated volume levels of the RFS2 assure biofuels producers a market regardless of cost or price. They can pay whatever is necessary for raw materials, thereby inflating animal fats prices beyond the oleochemical industry's ability to compete, because their market is guaranteed. As noted above, once the price of animal fats is inflated beyond that of palm oil, the domestic oleochemical industry will have reached the tipping point of economic sustainability. ACI proposes the following to address the inequities posed by the RFS2 volume mandates:

##### Exclude Fats and Greases from Definition of "Renewable Biomass"

The definition of "renewable biomass" includes "Animal waste material and animal byproducts." Animal byproducts, e.g., fats and greases, have long, well-established markets in oleochemicals as well as pet foods and other applications. While in general, all the other stipulated constituents of "renewable biomass" are either expandable crops or genuine waste products without pre-existing markets; animal-fats and greases are traded as commodities, have a recognized economic value, are a critical raw material for an existing industry and are not an expandable supply. Neither are they wastes: the price per barrel for tallow is similar to and at times higher priced than a barrel of crude oil. ACI believes that reconsideration of their inclusion ought to be undertaken. They ought not to be included in this definition.

A precedent for such consideration is found at Section 932(a)(C)(i) of the "Energy Policy Act of 2005." In defining biomass derived from "forest-related" materials the phrase "...or otherwise non-merchantable material" is applied. The clear implication of this is that material which otherwise has a market is excluded from the definition. ACI would respectfully urge that similar language be included in the current "renewable biomass" definition.

##### Eliminate Alternative Fuel Tax Credits for Direct Burning of Animal Fats

The alternative fuel tax credit currently applies to the direct burning of fats in boilers and other stationary facilities. Such burning was a longstanding practice prior to the subsidy and based on market prices for fuels and fats. As such, it was a practice analogous to the burning of "black liquor" by the paper industry. Consequently, it ought to be eliminated as well.

Legislation to accomplish these changes is attached as well. The proposal is based on existing exemptions found in related statutes that already account for the diversion of essential raw materials from historical uses to biofuel production.