

July 20, 2009

The Honorable Lisa Jackson
Administrator
U.S. Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

Re: EPA Docket No: [EPA–HQ–OAR–2009–0211; FRL–8894–5] “Notice of Receipt of a Clean Air Act Waiver Application to Increase the Allowable Ethanol Content of Gasoline to 15 Percent; Request for Comment

Our organizations strongly oppose Growth Energy’s petition to allow blends of more than 10 percent ethanol in gasoline. Although we strongly support the use of advanced and cellulosic biofuels, prematurely allowing blends of E12 or E15 will create incentives for gasoline refiners to eventually use as much as 22 billion gallons of corn ethanol, diverting nearly half of the U.S. corn crop from food and feed to fuel. This change will have direct impacts on the ability of livestock, poultry and dairy producers to effectively predict future annual budgets and costs due to volatility in the markets as feed is the largest input cost associated with raising food producing animals.

The Problem

Current U.S. biofuels policies and regulations contain inherent contradictions, and have also resulted in significant economic damage outside of the energy economy. In particular, the large increases in Renewable Fuel Standard (RFS) volumes contained in the Energy Independence and Security Act of 2007 (EISA) did not fully account for limitations imposed by the potential inability to produce the amount of corn required without significantly disrupting the marketplace. Together with the renewable fuel tax credits and the tariff on imported ethanol, the expanded RFS has increased the cost of both food and fuel production, and strained our ability to produce food.

In an attempt to accommodate future RFS increases, EPA is evaluating a petition from Growth Energy that calls for an increased maximum blend rate. There are significant issues related to the dangers these blends pose to certain engines, and we leave it to others with greater expertise in this area to describe those dangers in detail. However, even if engine and related system issues are resolved, and the blend rate is increased, the largest and most pressing contradiction in renewable fuels policy will not be resolved.

Increasing the maximum blend level above 10 percent will, in the next two years:

- Divert at least 800 million more bushels of corn to ethanol production;
- Create more volatility in a grain market now four times as volatile as it was just four years ago;
- Increase feed costs for livestock, poultry and dairy producers;
- Further reduce U.S. meat, poultry and dairy production by 3 percent-4 percent;
- Increase the retail prices of meat, poultry and dairy products by an additional 7 percent to 10 percent.

The limited availability of new cropland implies that crops used for biofuels will be diverted from food or feed use. An increase in the blend rate will exacerbate the economic damages to the food and fuel sectors resulting from increasing biofuels production.

The Blend Rate and RFS Economic Effects

While the RFS offers a degree of government guaranteed demand for fuel ethanol, it has not resulted in a prosperous or sustainable ethanol sector. As of July 19, 2009, there were 36 U.S. ethanol plants, representing 16.8 percent of industry capacity, that were not operating¹.

In addition, increasing ethanol use has done significant damage to the nation's food production capacity. As was pointed out in a 2008 Iowa State study², if the RFS is higher than the market demand for ethanol it will result in higher-than-market prices for both ethanol and corn. As evidenced by 36 closed ethanol plants and feed prices that have been nearly double those of three years ago, this is the current situation. Increasing the blend rate to accommodate the RFS schedule will not help the long-term future of the ethanol industry and will cause further economic harm to the food production system.

The current FarmEcon LLC forecast of corn supply and demand assumes that the RFS will determine the 2009/2010 and 2010/2011 demand for corn for ethanol and the blend limit is increased to at least 12 percent. The forecast shows that for crop years 2009/2010 and 2010/2011 increased ethanol production would cause further significant increases in grain and oilseed costs to food producers, and increases costs of both ethanol and food production. Supplies of grain available for food production would be decreased. Cost increases and less available grain will further erode the economic viability of both the ethanol and food sectors.

The fundamental economic issue is simple. While the RFS and blend rates may mandate ethanol production, they cannot mandate corn plantings, production or prices. Nor can mandates create more total land for farm use. Since 2005, corn prices have increased significantly, and price volatility has quadrupled, largely as a result of increased corn demand for ethanol production and limited land available for corn plantings.

Despite the USDA forecast of a 10 percent increase in ethanol production from the 2009 corn crop the latest USDA survey showed that farmers intended to increase corn plantings by only 1 percent³. The lack of ability to increase corn planting in line with ethanol production is gradually squeezing other corn users out of the market.

The lack of an increase in the 2009 corn plantings in line with ethanol production increases will likely cause stocks declines for corn. In addition, USDA is currently also forecasting low stocks for soybeans and other crops. Low stocks create higher and more volatile prices for the crops used by livestock, poultry and milk producers. Higher and more volatile feed costs undermine the viability of our food production system.

Largely as a result of increased ethanol use, the cost of the 2008 crop corn was increased by \$2.10 per bushel over the 2005 crop. Based on 12 billion bushels of total use that represents a \$25.2 billion annual cost increase for corn's food, feed, ethanol and export users. Higher corn

¹ Ethanol Producer Magazine. 7/19/2009. found at <http://www.ethanolproducer.com/index.jsp>

² Babcock, Bruce. "When Will the Bubble Burst?" *Iowa Ag Review*. Winter, 2008.

³ USDA, WASDE-472, 7/10/2009

prices have also had the effect of causing higher prices for soybeans, wheat, rice and other crops. Cost of production and prices of ethanol are also increased.

As a result of those higher and more volatile costs, the largest ethanol producer (Verasun) and the largest broiler producer (Pilgrim's Pride) both went into bankruptcy. Since January 1, 2009, approximately 12 other ethanol companies have also taken bankruptcy. The financial problems of these firms can be largely traced to U.S. biofuels policies that has forced more corn into ethanol use, artificially raised corn prices, and created greater volatility in the marketplace. In addition, the entire U.S. meat, poultry and dairy sector is in the process of sharply reducing production in order to offset higher costs. FarmEcon LLC estimates that 2009 U.S. meat and poultry production will decline a record 3 billion pounds from 2008 levels (Figure 1, next page). In addition, milk production will need to decline 3 percent-4 percent to restore sustainable prices for dairy farmers.

2009-2011 Cost Forecast with Expanded RFS and Higher Blend Limits

Corn supply and demand forecasts assume that the current RFS schedule is implemented and the Growth Energy petition is granted are contained in the table below⁴.

Table 1: Corn Supply, Demand and Prices

Item	2005/2006	2006/2007	2007/2008	2008/2009 USDA fcst.	2009/2010 FarmEcon fcst.	2010/2011 FarmEcon fcst.
Area Planted (Mill. Ac.)	81.8	78.3	93.5	86.0	87.0	88.0
Area Harvested (Mill. Ac.)	75.1	70.6	86.5	78.6	80.1	83.0
Yield (Bu/Ac)	148.0	149.1	150.7	153.9	151.0	152.0
Beginning Stocks (Mill. Bu.)	2,114	1,967	1,304	1,624	1,770	1,455
Production (Mill. Bu.)	11,114	10,535	13,038	12,101	12,095	12,616
Imports (Mill. Bu.)	9	12	20	15	15	15
Total Supply (Mill. Bu.)	13,237	12,514	14,362	13,740	13,880	14,086
Feed Use (Mill. Bu.)	6,155	5,598	5,938	5,250	5,100	4,900
FSI Use (Mill. Bu.)	2,981	3,488	4,363	4,920	5,375	5,800
Fuel Ethanol Use (Mill. Bu.)	1,603	2,117	3,026	3,650	4,100	4,500
Other FSI Use (Mill. Bu.)	1,378	1,371	1,337	1,270	1,275	1,300
Exports (Mill. Bu.)	2,134	2,125	2,436	1,800	1,950	1,950
Total Use (Mill. Bu.)	11,270	11,210	12,737	11,970	12,425	12,650
Ending Stocks (Mill. Bu.)	1,967	1,304	1,624	1,770	1,455	1,436
U.S. Average Farm Price, \$/Bu.	\$2.00	\$3.04	\$4.20	\$4.10	\$4.50	\$4.75
% Ethanol	14%	20%	23%	30%	34%	36%
Stocks-to-Use Ratio	17%	12%	13%	15%	12%	11%

As a result of the combined effects of the proposed higher blend limits and RFS increases the 2009/2010 cost of corn to the U.S. economy is forecast to increase by another \$0.40 per bushel. That together with higher prices for other major commodities will drive the cost increases for domestic food and feed users up by \$26 billion versus 2004/2005 (Table 2). As importantly, domestic food and feed use of all major crops are forecast to decline in 2009/2010.

In the following year (2010/2011) the estimated cost rises to an additional \$29 billion versus 2005/2006, and an incremental cost of about \$3 billion over 2009/2010.

⁴ 2005/2006 to 2008/2009 are from USDA, World Outlook Board, as of 7/10/2009. 2009/2010 and 2010/2011 are forecast by FarmEcon LLC.

In perspective, net of tax credits, the total value of ethanol produced in 2008 was approximately \$17 billion. In other words, the current market value of ethanol production is substantially less than the ethanol-induced cost increases in the U.S. economy in 2008. This creates a substantial economic welfare loss for the entire U.S. economy.

In addition to the higher costs shown in Table 2 (below) the United States has also seen a dramatic increase in the volatility of feed costs. In 2008, the monthly average cost of major feed ingredients used in meat and poultry production was approximately four times as volatile as they were in 2005-2006. This level of volatility introduces added risks to businesses depending on feed as their primary input for meat, dairy and poultry production. Ethanol producers are also subject to this higher risk. Separate and apart from higher costs, higher risks also discourage production.

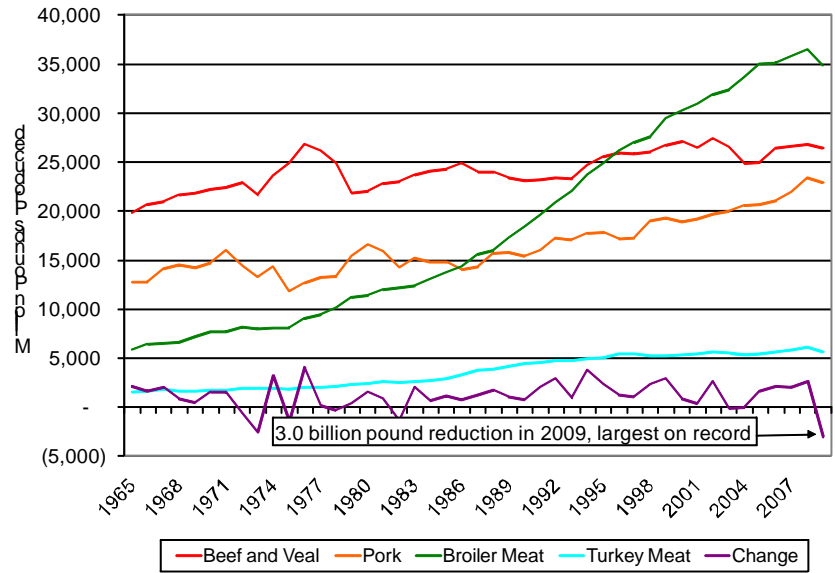
Table 2: Cost of Higher Commodity Prices to U.S. Food and Feed Users

Item	2005/2006	2006/2007	2007/2008	2008/2009 USDA fcst.	2009/2010 FarmEcon fcst.	2010/2011 FarmEcon fcst.
Prices						
Corn, \$/bu	\$2.00	\$3.04	\$4.20	\$4.10	\$4.50	\$4.75
Soybean meal, \$/ton	\$174.00	\$205.00	\$336.00	\$320.00	\$300.00	\$350.00
Soybean oil, cents/lb	23¢	31¢	52¢	32¢	35¢	34¢
Sorghum, \$/bu	\$1.86	\$3.29	\$4.08	\$3.20	\$4.00	\$4.25
Barley, \$/bu	\$2.53	\$2.85	\$4.02	\$5.37	\$4.50	\$4.75
Oats, \$/Bu	\$1.63	\$1.87	\$2.63	\$3.15	\$3.00	\$3.25
Rice, \$/cwt	\$7.65	\$9.74	\$12.80	\$16.05	\$12.00	\$14.00
Wheat, \$/bu	\$3.42	\$4.26	\$6.48	\$6.78	\$5.75	\$6.00
Domestic food/feed use						
Corn, mill. bu.	7,533	6,969	7,275	6,520	6,375	6,200
Soybean meal, tons	33,195	34,360	33,192	30,650	30,800	30,500
Soybean oil, mill. lb.	16,806	15,947	15,084	14,550	14,500	14,250
Sorghum, mill. bu.	190	154	199	330	240	230
Barley, mill. bu.	210	211	201	235	230	220
Oats, mill. bu.	209	199	194	183	200	195
Rice, cwt	120	127	127	133	132	130
Wheat, mill. bu.	1,152	1,140	1,050	1,248	1,263	1,200
Added Cost vs. 2005/2006, \$million						
Corn	na	\$7,247	\$16,005	\$13,692	\$15,938	\$17,050
Soybean meal	na	\$1,065	\$5,377	\$4,475	\$3,881	\$5,368
Soybean oil	na	\$1,276	\$4,374	\$1,310	\$1,740	\$1,568
Sorghum	na	\$220	\$442	\$442	\$514	\$550
Barley	na	\$68	\$299	\$667	\$453	\$488
Oats	na	\$48	\$194	\$278	\$274	\$316
Rice	na	\$265	\$654	\$1,117	\$574	\$826
Wheat	na	\$958	\$3,213	\$4,193	\$2,943	\$3,096
Total	na	\$11,147	\$30,559	\$26,175	\$26,316	\$29,261

In summary, any economic value added by additional ethanol production is being more than destroyed by higher costs, lost sales and increased business risks elsewhere in the economy. Lower production of other items that depend on grains has resulted. Forced ethanol production is a net economic drag on the economy, and as such expansion should be discouraged.

Figure 1: U.S. Meat Production 1965-2009 fcst.

Key Point:
 2009 will see the largest reduction on record in U.S. meat and poultry production. Approximately \$7.8 billion in retail meat and poultry sales will be lost



The Department of Energy, EPA and the Department of Agriculture are required by the Energy Independence and Security Act to examine the impact of biofuels policy on food production and food security. In its second year, the Act has been a major factor in the largest decline in meat and poultry production in history. Any further policy-induced increases in ethanol production will further increase the negative impact on the food economy, all food consumers and further compromise the U.S. food supply.

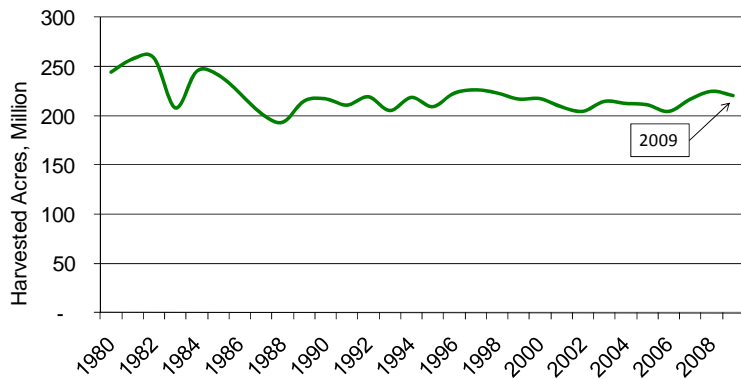
Also, it is becoming clear that the United States cannot produce the corn required to ensure economic viability for even highly subsidized ethanol producers. A partial list of ethanol producers going through or who have been in bankruptcy includes VeraSun Energy Corp., White Energy, Aventine Renewable Energy Holdings Inc., Gateway Ethanol LLC, Wyoming Ethanol LLC, Renew Energy LLC, Panda Ethanol Hereford, Northeast Biofuels LP, Cascade Grain Products LLC, Greater Ohio Ethanol, Pacific Ethanol and Mid America Agri Products Horizon. Other ethanol producers have indicated severe financial issues and will likely join this list in the near future.

Increasing the blend limit will not make significantly more corn available, nor will it lower corn prices. The corn-based ethanol industry at its current scale is not economically sustainable. Corn production capability and land resources are the limiting factors. Since the 1980s total U.S. harvested acres for grains and oilseeds has not materially increased. We are farming almost all of our productive acres and have little in the way of land reserves to be brought into food production (Figure 2).

Figure 2: Harvested Acres of Grains and Oilseeds⁵

Key Point:

Harvested acreage of U.S. grains and oilseeds has not changed significantly in 20 years. Land needed to produce the amount of corn implied by increasing the ethanol blend rate is not available unless it is taken from other crops. The limits on land availability mean that more crop use for ethanol will come from the U.S. food/feed supply.



Generous tax credit support, mandated use, higher blend limits and a high tariff wall cannot increase crop yields or make more farmland available. The lack of additional land means that any corn planting increase from a higher blend limit will come from other crops, creating shortages, and along with higher corn prices, raising grain prices to U.S. food producers as well.

The constraints imposed by the limits on land available for crop production limit the amount of ethanol that can be produced. If you convert the entire 2008 **global** corn crop were to be used for U.S. ethanol, leaving none for food, it could produce 74 billion gallons. With 66 percent of the energy content of gasoline, that would displace about 49 billion gallons of gasoline, about 35 percent of current U.S. consumption, and 3.7 percent of global oil production. Replacing a meaningful portion of fuel demand with corn-based ethanol is simply not possible today, nor will it be possible in the foreseeable future.

Recommendations

On behalf of all U.S. food consumers and producers, the groups below urge EPA to reject the Growth Energy petition, and any effort to allow blends of ethanol more than 10 percent. Additionally the following actions are recommended to protect food and fuel consumers and ensure any increase in potential ethanol blends will not be filled by U.S. production of corn-based ethanol:

- DOE and EPA should complete assessment impacts of higher blends and certify that for all gasoline engines there are no manufacturer warranty, performance, safety or environmental concerns.
- DOE and USDA should complete a comprehensive review, including the use of impartial third-party experts, on the effects of conventional ethanol production on meat, dairy and poultry production, food production costs and retail food prices.

DOE and USDA should work with Congress to address a comprehensive structure that supports the U.S. ethanol industry and work to find sensible solutions for all feed grain users.

⁵ Source: USDA Production, Supply and Demand database accessed 7/19/2009. Crops included are corn, sorghum, barley, oats, rye, wheat, soybeans, sunflowers and rapeseed.

Thank you for the opportunity to provide our comments. We appreciate your attention to this critically important decision that will have far reaching effects on American food producers and consumers.

American Meat Institute
National Turkey Federation