# Regulation of Fuels and Fuel Additives: Renewable Fuel Standard Program

Summary and Analysis of Comments

Chapter 9 Renewable Fuel Production and Use

> Assessment and Standards Division Office of Transportation and Air Quality U.S. Environmental Protection Agency

# **RFS Summary and Analysis of Comments**

# 9 RENEWABLE FUEL PRODUCTION AND USE

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#### 9 RENEWABLE FUEL PRODUCTION AND USE

What We Proposed:

The comments in this section correspond to Section VI of the preamble to the proposed rule and are targeted at the projected renewable fuel production and use. A summary of the comments received, as well as our response to those comments, are located below.

## 9.1 Ethanol Industry - Future Production/Consumption

What Commenters Said:

The American Petroleum Institute (API) took issue with several statements EPA made in the draft Regulatory Impact Analysis (DRIA) associated with this rule. The commenter believed that the statement "Over the last 25 years, domestic fuel ethanol production has steadily increased due to technological advances, environmental regulation, and the rising cost of crude oil," (p.117) was misleading, as the cost of crude oil has both increased and decreased over the last 25 years. The commenter also believed that the following statement was speculative and should be removed: "record-high crude oil prices are expected to continue to drive up demand for ethanol" (p.119). API believed that the following statement was also speculative: "However ethanol production is not expected to stop here ... If all these plants come to fruition, the combined domestic ethanol production could exceed 20 billion gallons..." (p.121).

#### Letters:

American Petroleum Institute (API) OAR-2005-0161-0185

Our Response:

We have considered API's comments on crude oil's impact on ethanol use and made some slight modifications to our final rule making text. We have made reference to "market demand" where appropriate. We have also elected to maintain some references to the impact of crude oil price on ethanol demand. While ethanol market demand is a function of many factors (environmental regulation, state MTBE bans, ethanol mandates, production subsidies, and retail incentives, to name a few), it is directly affected by the price of crude oil. In the Annual Energy Outlook (AEO) 2006, the Energy Information Administration (EIA) forecasted 9.6 billion gallons of ethanol use by 2012 based on forecasted crude oil pricing of \$48/bbl. In the early release of AEO 2007, EIA is forecasting increased ethanol use (11.2 billion gallons by 2012) based on an increased crude oil forecast (\$52/bbl). While EIA's linear programming (LP) model used to determine future ethanol consumption is dependent on many factors (e.g., feedstock availability and how fast plants could feasibly come online), crude oil price is certainly

one of them. The higher the crude oil price, the more attractive ethanol blending becomes.

# 9.2 Biodiesel Industry- Future Production/Consumption

#### 9.2.1 Biodiesel Demand in 2012

What Commenters Said:

EPA received two comments related to our estimates of biodiesel demand in 2012. Both commenters stated that EPA's estimate, 300 million gallons, was low. FutureFuel believed that biodiesel sales were supply limited, not demand limited. The commenter cited National Biodiesel Board data that suggested that the biodiesel industry itself believes demand currently is substantially greater than 300 million gallons, and stated that it believes EPA should take this into consideration. A private citizen noted that if the Biodiesel Blender's Tax Credit is not extended beyond 2008, biodiesel production would likely be attenuated unless energy prices are much higher than our analysis assumed. Nonetheless, the commenter believed it would be appropriate to use a scenario that assumed continued incentives for biodiesel production at both the federal and state levels.

#### Letters:

FutureFuel OAR-2005-0161-0198

Private Citizen OAR-2005-0161-0158, -0159

Our Response:

We realize that the 2012 biodiesel demand forecast of 300 million gallons generated by EIA seems conservative, but this may be reasonable considering the expiration of key tax incentives. We agree that the fraction of the growing methyl ester production capacity that will be sold as biodiesel will be largely dependent on extension of tax incentives and implementation of state mandates (similar to the history of ethanol blending). However, lacking any more certain estimate for the analysis of inputs for the final rule, we have continued to utilize the EIA forecast estimate of 300 million gallons.

### 9.2.2 Biodiesel Production Capacity vs. Projected Use

What Commenters Said:

One private citizen commented on the discrepancy between the 2005 domestic capacity for biodiesel production, 290 million gallons, and actual production of 91 million gallons.

## **RFS Summary and Analysis of Comments**

Letters:

Private Citizen OAR-2005-0161-0158, -0159

Our Response:

Biodiesel production plants can sell methyl esters into various chemical markets and have been doing so for years. They are a valuable feedstock in the manufacture of lubricants, polymers, detergents, soaps, and other common products. Therefore, we believe it is useful to keep in mind that biodiesel competes with other uses for the methyl esters from these facilities based on price and demand. This helps to explain the discrepancy in biodiesel production capacity and its projected use as fuel.