MARGO T. OGE
DIRECTOR, OFFICE OF TRANSPORTATION AND AIR QUALITY
OFFICE OF AIR AND RADIATION
U.S. ENVIRONMENTAL PROTECTION AGENCY

COMMITTEE ON SMALL BUSINESS
SUBCOMMITTEE ON REGULATIONS AND HEALTHCARE
UNITED STATES HOUSE OF REPRESENTATIVES
MAY 21, 2009

Written Statement

Madam Chairman and members of the Subcommittee, I appreciate the opportunity to appear before you today to testify on the renewable fuel provisions of the Energy Independence and Security Act of 2007 (EISA). EPA recently signed a notice of proposed rulemaking for the Renewable Fuel Standard as required by EISA, commonly called RFS2. This is an important step toward achieving the significant energy security and greenhouse gas (GHG) emission reduction benefits of this program. Over the coming months we will review the comments and develop a final rule that responds as appropriate to the public comments.

The proposed rule would revise the current RFS program, established by the Energy Policy Act of 2005, and implement several important changes to these renewable fuel requirements. EISA requires a substantial increase in the volume of renewable fuel and extends the timeframe for reaching the new target of 36 billion gallons to 2022. Several specific volume targets must also be met by 2022, including 21 billion gallons of advanced biofuels, comprised of 16 billion gallons of cellulosic biofuel, 4 billion gallons of "other" advanced biofuels, and a minimum of 1 billion gallons of biomass-based

diesel. We estimate that these volumes of biofuels will reduce GHG emissions from transportation by an average annualized emissions rate of 150-160 million tons of CO2 equivalent per year-- reductions estimated to be equivalent to annual emissions produced by 23 to 24 million vehicles. EPA also has calculated that the RFS2 rule could bring about more than $3 billion in total energy security benefits, displacing an estimated 15 billion gallons of petroleum-based gasoline and diesel, as well as provide an expanded market for agricultural products. Our analysis estimates that by 2022, the RFS program will increase net U.S. farm income $7.1 billion, an increase of more than 10 percent. There will also be a significant increase in domestic markets for cellulosic feedstocks as well as many new business opportunities for entrepreneurs involved in the production, distribution, and sale of renewable fuels and their feedstocks.

EPA is sensitive to the potential impacts regulations may have on small businesses and further recognizes that a significant number of biofuel production facilities are indeed small businesses. We believe that EPA's proposed rules to implement the Renewable Fuel Standard program will provide significant direction for further investment in the renewable fuel industry. As of this Spring, there are 138 biodiesel production facilities with plant size ranging from less than 1 million gallons per year (a few tank trucks of product per week) to more than 50 million gallons per year (two dozen trucks of product per day). The most common size is 8.5 million gallons per year, so most biodiesel facilities are small in comparison to ethanol plants and especially petroleum refineries. Most biodiesel plants are individually-owned businesses employing just a few staff and may be run as family businesses. These smaller plants typically

produce small batches of fuel with periods of downtime when feedstock prices are not favorable. If our country is to meet the renewable fuel standards, and in particular the biomass-based diesel standard as mandated by Congress, in the near term we will be dependent on many such businesses. For this reason, we coordinated extensively throughout the development of the NPRM with the biodiesel industry, ethanol industry, and other stakeholders and incorporated their feedback into the design of the program.

We have heard from many of the small businesses in the renewable fuel industry and have provided as much flexibility as possible under the statute to address their concerns in our regulatory proposal. Later in this testimony, I will describe two key provisions of the proposal which we believe are of particular value to small businesses in the biodiesel industry. In each case, we are looking forward to engaging the community of affected small businesses further and considering their comments provided to us through the public comment process.

A key component of the RFS2 program is the lifecycle greenhouse gas impact assessment of renewable fuels. EISA created the first mandatory lifecycle greenhouse gas (GHG) reduction thresholds for renewable fuels used in the U.S. The statute assigns specific emission reduction thresholds for each of the four categories of renewable fuels required by the Act -- requiring a 20 to 60 percent improvement compared to the baseline lifecycle emissions value for gasoline and diesel used in 2005. EISA requires EPA to look broadly at lifecycle analyses and to develop a methodology that accounts for each of

the important factors that may significantly influence this assessment, including both direct and indirect emissions, such as significant emissions from land use changes.

EPA, working with experts, including those from the Departments of Agriculture and Energy as well as industry and academia, has spent the last year and a half developing a robust and scientifically supported methodology that identifies direct and indirect emissions, including those resulting from international land use change. We believe this methodology meets our statutory obligations under EISA.

At the same time, we have heard concerns that the state of the science is too uncertain regarding the assessment of GHG emissions, particularly those related to international land change. Recognizing that lifecycle analysis is a new part of the RFS program and much of our methodology represents groundbreaking science, the Agency has set forth multiple opportunities to solicit public and expert feedback on our proposed approach. In addition to the formal comment period on the proposed rule, EPA plans to hold a two-day public workshop focused specifically on lifecycle analysis during the comment period. Additionally, although our lifecycle analysis relies whenever possible on peer-reviewed models and data, between this proposal and the final rule, we will conduct additional peer-reviews of key components of our analysis.

In regard to the implications of lifecycle greenhouse gas reduction requirements for biodiesel facilities and other existing small renewable fuel producers, it is important to highlight that the Act “grandfathers” renewable fuel produced from facilities either in

production or under construction prior to enactment. This effectively means that biodiesel, corn ethanol, sugarcane ethanol, and any other renewable fuel produced by existing facilities in the U.S. or abroad automatically qualify for use in compliance with the 15 billion gallon portion of the total 36 billion gallon mandate that may be satisfied with non-advanced biofuels. This includes approximately 110 U.S. biodiesel facilities with a production capacity of approximately 1.9 billion gallons, as well as ethanol production facilities with an estimated capacity of 15 billion gallons of corn ethanol.

As I mentioned earlier, there are two key provisions in the RFS proposal that would help provide more flexibility to biodiesel producers. The first would make it easier for renewable fuels to meet the more stringent lifecycle GHG thresholds, including the biomass-based diesel threshold of 50 percent. Based on our two primary scenarios in the proposal, biodiesel produced from soy oil does not attain the necessary GHG threshold to qualify for the bio-mass-based diesel category. In one of our two primary scenarios biodiesel from soy oil attains a 22 percent reduction in GHG emissions over the baseline, which falls short of the 50 percent reduction requirement. However, biodiesel from waste fats and oils attains it by a considerable margin, attaining an 80 percent reduction. In light of the results from our lifecycle analysis, and in order to support the goals of the Act for the biomass-based diesel standard, we have offered a proposed option to apply additional flexibility specific to biodiesel producers. The proposal seeks comment on various approaches for allowing facilities that use multiple feedstocks during the year, such as soy oil and waste grease, to use the average GHG reduction profile so their product could also qualify for the biomass-based diesel standard. We also

have the option under EISA to lower the GHG threshold for biomass-based diesel to 40 percent from 50 percent. By allowing averaging, and lowering the threshold to the minimum allowable 40 percent, biodiesel producers could meet the lifecycle threshold by using as little as 31 percent use of waste fats and oils and as much as 69 percent soy oil. This corresponds to roughly the same ratio of soy oil use that biodiesel producers use today. Based on current information from the National Biodiesel Board, approximately 30 percent of the biodiesel produced today is produced from fats and greases. At least 70 percent of biodiesel production facilities today are capable of processing waste fats and oils in addition to soy oil and the others could be modified to do so. By taking advantage of this flexibility to average feedstocks, biodiesel producers will be able to produce sufficient volumes of feedstocks to meet or exceed the 1.0 billion gallon volume mandate established by EISA for biomass-based diesel in 2012.

Second, the proposal also offers an option that would allow biodiesel to contribute toward the 15 billion gallon conventional biofuel standard. The proposal seeks comment on continuing a provision developed in the RFS1 final rule to value each renewable fuel on an energy equivalent basis. If we were to finalize this approach for RFS2, it would provide biodiesel with a 50 percent greater credit due to its higher energy density. The value of these credits would help to improve the competitiveness of biodiesel in the renewable fuels marketplace.

In closing, I believe EPA has put forward a proposal that is responsive to Congressional intent for the RFS program. We believe we have developed the most

comprehensive approach undertaken to date to assess the lifecycle GHG impacts of renewable fuels. We are committed also to improvements in that assessment. With the benefit of input we will receive on the proposal during the public comment period, I am confident that we will be able to complete a RFS2 rule that will achieve the benefits envisioned by Congress--to reduce our dependence on foreign sources of crude oil, diversify our energy portfolio, and provide important reductions in greenhouse gas emissions. This rule will also provide important market opportunities for businesses to expand in the areas of agricultural and cellulosic feedstocks, renewable fuel technology and production, and renewable fuel distribution and sale.

We look forward to continuing the dialogue on our approach through the public comment process on the proposal.