Re: Docket No. EPA-HQ-OAR-2005-0161

To Whom It May Concern:

On behalf of the National Association of Clean Air Agencies (NACAA), we are pleased to submit to docket number EPA-HQ-OAR-2005-0161 the following comments on the U.S. Environmental Protection Agency’s (EPA’s) proposal (May 26, 2009, 74 Federal Register 24903) to amend the national Renewable Fuel Standard (RFS) program consistent with the provisions of the Energy Independence and Security Act of 2007 (EISA). NACAA is the association of air pollution control agencies in 53 states and territories and more than 165 metropolitan areas across the country.

Among the most significant changes EISA makes to the RFS program are 1) requiring, by 2022, that 36 billion gallons of our nation’s transportation fuel supply come from renewable sources and 2) changing the definition of a renewable fuel to include minimum lifecycle greenhouse gas (GHG) reduction thresholds.

Regarding the substantially increased volumes of renewable fuel, let us be clear: NACAA understands the energy security issues facing this nation and fully supports the goal of reducing our dependency on foreign oil. We further support the intended goal of reducing GHG emissions and cannot overstate the importance of ensuring that this program result in timely, real-world GHG emissions reductions,
rather than in increased GHG emissions from activities, such as putting infrastructure in place, to generate renewable feedstocks.

With respect to air pollution, we have been concerned from the outset – dating back to the original 7.5-billion-gallon RFS (RFS1) mandated in the Energy Policy Act of 2005 – that commitments to increase the use of renewable fuels for the purposes of energy security and GHG emissions reductions have been made without sufficient study of the potential adverse air quality and human health impacts. Our concerns were heightened when, just two years later, in 2007, EISA instituted a five-fold increase in mandated renewables, to 36 billion gallons a year.

EPA’s own data confirm that we had good reason to worry. The agency has estimated that in 2022, the combined upstream and downstream emissions from the 36-billion-gallon-a-year RFS will result in a 2.5- to 3.0-percent increase, over RFS1, in the total U.S. inventory of oxides of nitrogen (NOx), a 0.6-percent increase in hydrocarbons (HC), a 1.0-percent increase in PM10, a 0.3-percent increase in PM2.5 and a 28- to 38-percent increase in the toxic air pollutant acetaldehyde. To the uninitiated, such percentages may sound insignificant, but in reality they are anything but that.

For decades, our nation has worked diligently to protect human health and welfare from the very serious consequences posed by high levels of criteria pollutants and their precursors – including NOx, HC and PM – as well as toxic air pollutants, and our work is far from finished. Yet, we are now faced with a program that would sacrifice our hard-earned gains by substantially increasing air pollution and imperiling public health. To allow this to proceed unchecked is unacceptable.

Although Congress included anti-backsliding provisions in EISA to study and offset the adverse impacts of the RFS on air quality, these provisions are very limited in scope, requiring mitigation of vehicle tailpipe and engine emissions only, and solely through fuel regulations, without offering a mechanism for addressing the substantial
upstream air pollution that will occur. In fact, as EPA notes in its proposal, emissions from renewable fuel production, land use changes and other upstream activities exceed, by far, the tailpipe and engine emissions that result from renewable fuel use. As increased volumes of renewable fuels displace gasoline, these upstream emissions will increase significantly unless appropriately rigorous controls are put in place now. Therefore, we urge strongly that before EPA takes final action on this rule, the agency ensure that the full range of air quality impacts of the RFS – upstream and downstream – is comprehensively quantified, that appropriate mitigation measures are identified and that provisions for timely implementation of these mitigation measures are included in the final rule (e.g., BACT review for all pollutants).

A second key issue of concern to NACAA is that of lifecycle analyses of GHG emissions from renewable fuels and the consideration of land use changes in these analyses. Consideration of the full lifecycle emissions impacts of the RFS, including direct and indirect emissions, is critically important if we are to ensure the program achieves its GHG emissions reduction goals.

To determine whether different renewable fuels meet the GHG thresholds established in EISA, EPA has analyzed the lifecycle GHG emissions of renewable fuels and compared them to those of conventional transportation fuel. EISA defines lifecycle GHG emissions as:

...the aggregate quantity of greenhouse gas emissions (including direct emissions and significant indirect emissions such as significant emissions from land use changes), as determined by the Administrator, related to the full fuel lifecycle, including all stages of fuel and feedstock production and distribution, from feedstock generation or extraction through the distribution and delivery and use of the finished fuel to the ultimate consumer, where the mass values for all greenhouse gases are adjusted to account for their relative global warming potential.

NACAA firmly endorses the inclusion of land use changes in the lifecycle analysis and appreciates EPA’s breakdown in the proposal of various fuel pathways,
lifecycle components and relative GHG emissions impacts. EPA has examined these factors over various time horizons to compare emissions that occur in the near term to those that could occur in the long term. By highlighting in the proposal the results of its analysis of two of the time horizons – 30 years and 100 years – the agency illustrates that biofuel-induced land use changes (i.e., the conversion of land to produce renewable fuel feedstock) can result in overwhelming GHG emissions in the near term with respect to certain renewable fuels, such as corn ethanol, sugarcane ethanol and soy-based bio-diesel, and that it can take significant time (much more than a few years) for these adverse emissions impacts to be negated by replacing petroleum with biofuels. Although the GHG impacts under the 100-year scenario are far more positive, it is unrealistic to base renewable fuel policies and regulations on such a long-term analysis. NACAA, therefore, urges EPA to rely on the 30-year analysis so that appropriate market incentives are created for advanced biofuels that will result in true GHG benefits.

We are aware that some have taken issue with EPA’s inclusion of land use changes in the GHG lifecycle analysis, alleging that the analysis methodology is too fraught with scientific uncertainty. We disagree. We believe that EPA’s analysis – which is based on the latest peer-reviewed process and economic models – is scientifically credible and suitable for use in this rulemaking. Further, since EPA proposed this rulemaking, the agency has held an intensive public workshop on its lifecycle GHG analysis and, further, initiated an independent peer review on four aspects of the lifecycle analysis that charted new territory. At the conclusion of the peer review, a majority of reviewers acknowledged the importance of moving forward with regulatory action at this time based on the current analysis, notwithstanding any lingering uncertainties. NACAA concurs strongly with this conclusion and notes that as science progresses EPA can make adjustments accordingly. In the meantime, however, the alternative – to ignore the huge emissions impacts of land use changes for fear the analysis methodology may not be 100 percent precise – would be highly irresponsible.
On behalf of NACAA, we thank you for this opportunity to provide comments on this proposal. If you have questions, or if we can provide further information, please do not hesitate to contact us.

Sincerely,

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