## United States Senate WASHINGTON, DC 20510

March 13, 2009

The Honorable Lisa P. Jackson Administrator U.S. Environmental Protection Agency Ariel Rios Building 1200 Pennsylvania Ave., NW Washington, DC 20460

## Dear Administrator Jackson:

In a letter to Administrator Johnson in November several of us recommended that the EPA not include calculations of indirect land use change (ILUC) effects as contributors to lifecycle greenhouse gas (GHG) emissions for biofuels in the forthcoming Notice of Proposed Rulemaking (NOPR) for implementation of the updated Renewable Fuels Standard (RFS-2) enacted in the Energy Independence and Security Act (EISA) of 2007 (P.L. 110-140). This letter repeats that recommendation and expands on its basis.

Under RFS-2, various biofuels must meet specified life-cycle GHG emission reduction targets to qualify. The law specifies that life-cycle GHG emissions are to include "direct emissions and significant indirect emissions such as significant emissions from land use changes, as determined by the Administrator." Thus, for example, if increased production of a specific type of biofuel in the United States can be shown to cause a shift in land use, the immediate and future greenhouse gas emissions resulting from that land use change are to be included in the life-cycle GHG emissions for that biofuel when determining whether it is eligible to be counted towards the RFS-2 mandate.

We understand that EPA has developed a methodology for calculating the indirect land use change components of the life-cycle GHG emissions for various biofuels and intends to include results of that methodology in its proposed rulemaking for the RFS-2. We also understand that, according to EPA's methodology, the ILUC components contribute substantially to the life-cycle GHG emissions for several biofuels, including corn ethanol, sugarcane-based ethanol, and soy-based biodiesel. Indeed, according to EPA's current ILUC calculations, existing soy-based biodiesel production may not count towards the biodiesel mandate in RFS-2.

EPA acknowledges that quantification of the ILUC components of life-cycle GHG emissions for biofuels is very difficult at this time. Many factors drive land use changes. Quantifying land use changes resulting from biofuels production needs to take into account these other factors, such as population growth, economic growth that drives demand for land-based food, feed and fiber production, urbanization, extracting lumber or mineral resources, and, of course, the very different and rapidly evolving land use policies of the United States and other nations. Not only are the land use impacts of these factors difficult to quantify; there is considerable uncertainty about predicting their future magnitude and effects. There also is an unresolved debate about how present and future GHG emissions should be compared,

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specifically whether a discount rate should be applied to future GHG emissions, and if so, what might be an appropriate discount rate for future GHG emissions.

An additional complication for the EPA methodology is that it cannot foresee or model future land use restrictions that might result from future national or international agreements or policies. Because land use changes such as deforestation can result in very large GHG emissions, it is possible that future domestic and international climate change policies will include major provisions restricting land use changes. Indeed, that may be the most appropriate and effective way to reduce GHG emissions associated with land use changes. At the same time, these land use restrictions in future international climate change policies are a major factor whose effects cannot be quantified until they are adopted. And yet, ignoring them introduces a major uncertainty into quantifying the ILUC components of life-cycle GHG emission calculations for biofuels today.

Given the complexity and uncertainty of this issue as well as what we believe are basic analytical limitations, we urge EPA to refrain from including any calculations of the ILUC components in determining life-cycle GHG emissions for biofuels at this time. The premature publication and use of inaccurate or incomplete data could compromise the ability to formulate a sound approach to implementing this life cycle GHG emissions requirement in the future. And the resultant rulemaking confusion could seriously harm our U.S. biofuels growth strategy by introducing uncertainty and discouraging future investments. Instead, EPA should move forward in a manner that allows for public review and refinement of the methodology that is ultimately used to calculate the contributions to GHG emissions associated with ILUC.

Thank you in advance for your consideration of these recommendations.

Sincerely,

Tom Harkin

United States Senate

Kit Bond

United States Senate

Charles Grassley

United States Senate

Sam Brownback

United States Senate

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