Congress of the United States
Washington, DC 20515

May 26, 2022

The Honorable Thomas Vilsack
Secretary
U.S. Department of Agriculture
1400 Independence Ave, S.W.
Washington, DC 20250

The Honorable Michael Regan
Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

Dear Secretary Vilsack and Administrator Regan:

We are writing to draw your attention to rulemaking at EPA and USDA that should enable the development of a new industry with great potential to provide long-term carbon sequestration and carbon-negative cellulosic biofuels.

Iowa State University has developed an innovative auto-thermal fast pyrolysis process that converts corn stover and other kinds of crop residues to bio-oil (also known as biocrude), cellulosic sugar, and biochar. Bio-oil can be shipped to a refinery and turned into diesel or even into high-value sustainable jet fuel. Cellulosic sugar can be fermented at existing grain ethanol plants to produce ethanol, which can be used in cars or which new technology can turn into high-value sustainable jet fuel.

Iowa State University analysis demonstrates that pyrolysis can provide the foundation for production of cellulosic biofuel at a competitive price and that its biochar coproduct can make the biofuel carbon negative.

Biochar is a carbon-rich charcoal applied to soils to build soil quality and sequester carbon. By building soil organic matter and quality, biochar allows farmers to sustainably harvest crop residues without degrading their soils. Furthermore, the carbon in biochar persists in soils for hundreds to thousands of years. Its porous structure also provides a refuge for soil micro-organisms and slows the breakdown of crop residues and carbon from other sources.

We urge you to address two ongoing rule making processes that threaten to cut the legs out from under this potentially transformative new industry and the carbon negative biofuels and increased soil carbon, health and quality that it can provide.

EPA Rule Making on the Renewable Fuels Standard - EPA currently does not allow renewable fuels made from bio-oil and cellulosic sugar to qualify for RIN credits if they are shipped from a local pyrolyzer to two different upgrading facilities. For example, a local pyrolyzer shipping the bio-oil to a refinery for upgrading to diesel and the cellulosic sugar to a fermentation plant for upgrading to ethanol would not qualify for RIN credits. EPA has issued a proposed rule change that would allow one product (bio-oil) to be shipped to a different plant for upgrading into renewable biofuel, but not two products and not cellulosic sugars. We believe we

must allow both bio-oil and cellulosic sugars to be shipped to different facilities for further processing into qualifying renewable fuels.

NRCS Carbon Amendment Practice Standard 336 Final Rule – This practice standard provides guidelines for USDA cost share and incentive payments for application of biochar. We believe it must be expanded to include all biochar produced from crop residue.

Precluding cost share and incentive payments for biochar produced from crop residue is counterproductive and will result in a loss of soil carbon. Virtually all of the carbon in crop residue left on the soil is oxidized and released to the atmosphere as CO_2 within a few years. Removing a portion of crop residue and returning biochar, a much longer-lived form of carbon, would be far more effective at achieving the desired goals of building soil organic matter, quality and health.

We urge NRCS to include biochar produced from crop residue in the Carbon Amendment Practice Standard (336), with appropriate standards for ensuring erosion control, soil cover and organic matter maintenance on land from which the residue is removed.

Thank you for your attention to this important matter.

Sincerely,

Mariannette Miller-Meeks, M.D.
Member of Congress

Charles E. Grassley
United States Senator

Joni Ernst
United States Senator

Ashley Hinson
Member of Congress

Randy Feenstra
Member of Congress