



VIA ELECTRONIC FILING

November 1, 2021

Re: Climate-Smart Agriculture and Forestry Partnership Initiative: Request for Information (Docket No. USDA-2021-0010)

Dear Mr. Robert Ibarra,

NARA is the trade association representing the rendering industry in the United States and Canada. NARA's 34 member companies operate 178 rendering plants and represent over 95 percent of North American production. Included are independent renderers, many of which are multi-generation family-owned companies, as well as integrated packer-renderers that only process their own animal by-products.

We will address questions # 1, 2, and 8 in our comments.

Rendering is highly regenerative and sustainable. Renderers recycle bio-based animal leftovers (by-products) after harvesting and packing of livestock, poultry and aquaculture. These are leftovers people do not want to or cannot eat such as certain meats, organs, bones, fat, and hides. Renderers transform them into sustainable, usable, and valuable new products such as animal and pet food and hundreds of consumer and industrial products. U.S. renderers operate nationwide, often near livestock/poultry production in rural communities. They also reclaim and upcycle waste used cooking oil (UCO) from restaurants, other food service institutions, and food processors across the country.

Each year, renderers recycle a huge volume - more than 56 billion pounds - of meat and bone leftovers from livestock and poultry farming, meat processing, supermarkets, meat lockers, and restaurants. Without rendering, meat packing would be impossible since there is insufficient disposal for this huge volume of animal leftovers. These valuable by-products would be wasted without rendering and disposed of in landfills at a cost to public health and the environment. And if not for rendering, the nationwide capacity of available landfill space would be full in *only* four years. If animal by-products were disposed of in landfills, they would emit large volumes of greenhouse gases during decomposition that would be detrimental to air quality and runoff could threaten water quality. Rendering's contribution to GHG reduction is the equivalent of removing 18.5 million cars from the road a year.

Thank you for the opportunity to present these comments. Please contact me with any questions or for additional information at nfoster@nara.org or 703-683-0155.

Sincerely,

President & CEO

North American Renderers Association

Comments re: Climate-Smart Agriculture and Forestry Partnership Initiative: Request for Information
(Docket No. USDA-2021-0010)

November 1, 2021

“American agriculture and forestry can lead the world in solutions that will increase climate resilience, sequester carbon, enhance agricultural productivity, and maintain critical environmental benefits,” said Secretary Tom Vilsack in his introductory message in USDA’s “Climate-Smart Agriculture and Forestry Strategy: 90-Day Report” issued in May 2021.

The U.S. rendering industry is committed to being part of these contributions of American agriculture in order to address challenges posed by climate change described by Secretary Vilsack.

1. How would existing private sector and state compliance markets for carbon offsets be impacted from this potential federal program?

Rendered animal fats and waste UCO provide almost 30 percent of the feedstock used to produce biodiesel and renewable diesel and hold significant promise for the production of sustainable aviation fuel (SAF). Rendered fats and waste UCO have very low carbon intensity and are therefore highly attractive feedstocks for production of biofuels that reduce carbon emissions significantly below petroleum-based diesel. Compared to petroleum diesel, biodiesel and renewable diesel reduce GHG emissions by 78 percent with animal fat feedstock and 79 percent when waste UCO is used (source: National Biodiesel Board).

GHGs (such as carbon dioxide) sequestered from the environment via rendering are five times greater than those emitted by the rendering process (C.H. Gooding. 2012. Data for the Carbon Footprinting of Rendering Operations. Charles H. Gooding. *Journal of Industrial Ecology*, Volume 16, Number 2).

For this reason, *the renderers should be able to produce carbon credits for this sequestration of GHGs.*

Renderers and biofuel producers also need to be able to accurately account for their carbon intensity. For this reason, a federal program that creates a standardized measurement of carbon capture would be helpful to provide predictability and certainty in current and future carbon markets both in the private sector or catalyzed by USDA. This is preferable to individual, possibly differing, state measures and would also be useful for making environmental claims and providing customers with additional information on the products they purchase.

2. In order to expand markets, what should the scope of the Climate-Smart Agriculture and Forestry Partnership (CSAF) Program be, including in terms of geography, scale, project focus, and project activities supported?

NARA recognizes the CSAF program is focused on “climate-smart commodities,” which USDA defines as agricultural commodities “produced using *farming* practices that reduce GHG emissions or sequester carbon” (emphasis added). “Climate-smart commodities” extend beyond those produced through direct farming practices. NARA believes that rendered products are climate-smart commodities because rendering is an important GHG prevention technology. The rendering industry is a net carbon reducer since it sequesters carbon and other GHGs and upcycles them into ingredients for new products. And as widely-used feedstocks for biodiesel and renewable diesel production, rendered animal fats and waste UCO should also be recognized as instrumental in achieving climate-smart priorities such as lowering the carbon-intensity score of biodiesel and renewable diesel.

NARA recommends that USDA’s new CSAF Program recognize and support the rendering industry’s role in capturing carbon and upcycling it, as well as in preventing high levels of carbon emissions in landfills by diverting raw animal leftovers (by-products) from those disposal sites. Renderers are the original food waste reducers since all is reused and nothing is wasted.

A helpful and appropriate role for USDA would be to encourage and facilitate trading of carbon credits from those who capture or sequester carbon, including the rendering industry, to the best markets, whether private or public. As mentioned under question #1, the rendering process should be considered as qualified to generate carbon credits.

8. How can USDA ensure that partnership projects are equitable and strive to include a wide range of landowners and producers? a. How can the Climate-Smart Agriculture and Forestry Program include early adopters of CSAF practices?

As USDA develops the broad CSAF program, NARA recommends having a component that recognizes “early adopters” who have already been engaged in carbon reduction and addressing climate change. Having programs only for producers and processors just now starting to engage in climate-smart agriculture would put those who engaged in work to reduce GHG emissions at a competitive disadvantage. USDA must recognize that early adapters are contributing to carbon capture through their current practices and should be rewarded.

In closing, NARA offers two additional recommendations. As part of its department-wide focus on addressing the climate crisis, we encourage USDA to consider further research to discover new uses for climate-smart rendered commodities to replace less environmentally-friendly products. Specifically, NARA recommends further research into hazardous waste site/brownfields clean up and cement production.

President Biden’s *Executive Order on Tackling the Climate Crisis at Home and Abroad* directs the federal government to reduce the legacy of pollution in disadvantaged communities by developing and implementing strategies for economic revitalization of and investment. Cleanup of idled properties, such as brownfields sites, is a priority to turn them into new hubs for the growth of our economy.

Rendered proteins and fats are newly-discovered catalysts to clean up brownfields and Superfund sites containing widely prevalent pollutants such as trichloroethylene (TCE) and chromium, based on research

at Clemson University funded by the rendering industry's research organization, the Fats and Research Foundation (FPRF). Rendered animal protein and lipids in animal fats act as electron donors to produce a natural chemical reaction that converts pollutants into ethene, a naturally occurring benign gas also emitted by fruits and vegetables. NARA encourages USDA to support this research and assist in developing this important new use for rendered products.

Additional research is also needed to develop sustainable and durable structural material like cements to rebuild and modernize the nation's infrastructure. FPRF has funded some initially promising research into cement production using rendered fats and oils. Some rendered products are high in free fatty acids (FFAs) that can be used to produce strong and more sustainable cements. Clemson University researchers have developed such a process to use high FFA-content feedstocks to produce durable cements by reacting these materials with elemental sulfur, which is a residual waste product in surplus as a result of decades of a fossil fuel refining.