



NORTH AMERICAN RENDERERS ASSOCIATION  
Reclaiming Resources, Sustainably

February 2, 2024

Carolyn Hoskinson  
Director, Office of Resource Conservation and Recovery  
Office of Land and Emergency Management (5306T)  
U.S. Environmental Protection Agency  
1200 Pennsylvania Ave NW  
Washington, DC 20460

RE: Comments to the Draft National Strategy for Reducing Food Loss and Waste and Recycling Organics; Docket No. EPA-HQ-OLEM-2022-0415.

*Submitted online via Regulations.gov.*

Dear Ms. Hoskinson,

On behalf of the U.S. rendering industry, the North American Renderers Association (NARA) appreciates this opportunity to submit comments on the Environmental Protection Agency's (EPA) Draft National Strategy for Reducing Food Loss and Waste and Recycling Organics.

Established in 1933, NARA is the trade association representing the interests of the rendering industry in the United States and Canada. NARA's membership accounts for over 95 percent of North American production. NARA is the trade association representing the interests of the rendering industry in the United States and Canada. NARA's 32 member companies operate 178 rendering plants and represent over 95 percent of North American production. The industry includes independent renderers, many of which are multi-generation family-owned companies, as well as integrated packer-renderers that process only their own animal by-products.

### **Rendering as a Food Waste Solution**

The rendering industry is an important, active, yet overlooked, participant in the United States goal to halve food loss and waste by 2030 and to achieve a 50 percent recycling rate by 2030. The industry is active by upcycling more than 54 billion pounds of organic food loss and waste (FLW) from protein conversion facilities, further processing plants, farms, grocery stores, meat lockers, butcher shops, and restaurants. In North America, roughly half of an animal is typically considered edible, with the market readily embracing these products. However, the inedible portions present challenges in terms of identifying alternative uses. The inedible protein stream produced by livestock and poultry raised in this country is reclaimed by renderers, including

animal bones, fat, and hides. The rendering process involves cooking and drying meat and other animal by-products, as well as used cooking oil, to recover fats and proteins. Depending on the details of their sourcing as well as a variety of applicable state and federal regulations, fats and proteins are upcycled into their highest and best use. Products are sold into three primary market segments: pet food/animal feed, renewable fuels, and organic fertilizer. In addition, the rendering industry recycles roughly 1.6 billion pounds of used cooking oil (UCO) from restaurants into raw material for biodiesel, renewable diesel, and sustainable aviation fuel. The basic premise of the rendering industry is therefore a major contributor in the prevention of food loss and overall reduction in food waste and reducing potentially harmful emissions. The rendering industry has been at the center of organic recycling by upcycling leftovers from the food industry for more than 100 years.

The rendering industry is ideally positioned to help meet the goals of the Draft Strategy to:

- 1) Prevent the loss and waste of food.
- 2) Recycle food and other organic materials to support a more circular economy for all.
- 3) Reduce GHG emissions.
- 4) Save households and small businesses money.
- 5) Build cleaner, healthier communities.

### **Goal 1: Preventing the Loss and Waste of Food**

Given the fact that North American renderers upcycle more than 54 billion pounds of raw material each year, we were disappointed to see that rendering is not mentioned in the Draft Strategy. We respectfully encourage EPA, USDA, and FDA to consider the significant role that rendering plays in preventing food waste and incorporate rendering into the final Strategy.

Rendering is a solution that directly addresses food waste by finding practical uses for a wide range of meat products and byproducts, used cooking oil, and other food materials consumers consider inedible. Rendering recycles 99 percent of unwanted meat (coming from livestock and poultry farming, meat processing, supermarkets, meat lockers, and restaurants) and diverts it from landfills. Additionally,, as mentioned previously, renderers recycle 1.6 billion pounds of used cooking oil from restaurants into renewable fuels.

If all these leftovers were instead wasted and sent to landfill, all available landfill space in the U.S. would be completely full in less than four years. Simply put, renderers make our food production footprint smaller.

### **Goal 2: Recycling of Food and Other Organic Materials to Support a More Circular Economy for All**

Rendering is essential in producing sustainable animal feed ingredients and pet food, as well as many non-food products consumers use regularly. In fact, it may come as a surprise to learn how often we use products made with rendered material in our everyday lives.

Renderers often discuss the “Big 3” rendered product markets: pet food/animal feed, fuel, and fertilizer. However, other rendered products not mentioned as often include gel bone (rendered bone chips) used to create gel caps used for vitamins, supplements, and drugs.

Depending on its sourcing, rendered fat can be used in the production of a multitude of applications, such as detergents, fabric softener, deodorant, shaving cream, perfume, crayons, paint, waterproofing materials, cement, ceramics, chalk, matches, antifreeze, insulation, linoleum, and textiles

### **Goal 3: Reduce GHG Emissions**

The rendering industry contributes to reduction of carbon emissions by providing a large volume of its recycled ingredients as feedstocks to produce waste-based biomass-based diesel. According to the U.S. Energy Information Agency (EIA) Monthly Biofuels Capacity and Feedstocks Update report, dated December 29, 2023, used cooking oil and yellow grease reclaimed by renderers provides 21 percent of biomass-based feedstock and rendered animal fats provide 14 percent. Biomass-based diesel is important to reduce carbon emissions in the transportation sector. Biomass-based diesel’s feedstocks supplied by rendering have very low lifecycle carbon emissions. In 2010, EPA concluded that biomass-based diesel produced from used cooking oil and other recycled waste greases reduced lifecycle GHG emission by 86 percent compared to average 2005 petroleum emissions.

Rendering helps address another key goal of the Draft Strategy, and that is to reduce landfill methane emissions. Rendering prevents alternative disposal methods which lead to unnecessary GHG emissions. In fact, an average rendering plant sequesters five times more greenhouse gas emissions from the environment than it emits.<sup>1</sup> If not for rendering, the nationwide capacity of available landfill space would be full in only four years. If by-products were disposed of in landfills, during decomposition they would emit large volumes of greenhouse gases detrimental to air quality and runoff could threaten surface water quality.

### **Goal 4: Save Households and Businesses Money**

Livestock, poultry, and pet food industries need the essential protein and nutrients provided by rendered animal proteins and fats. Renderers work to supply these important customers with an ample and competitively priced supply of animal feed and pet food.

Renderer pickup of used cooking oil from restaurants saves municipal sewer and wastewater systems from becoming clogged. This helps prevent millions of dollars in damage, repairs and contaminated water quality from broken sewer lines and sewage back up.

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<sup>1</sup> Gooding, C.H. (2012), Data for the Carbon Footprinting of Rendering Operations. *Journal of Industrial Ecology*, 16: 223-230. <https://doi.org/10.1111/j.1530-9290.2011.00430.x>

## **Goal 5: Build Cleaner, Healthier Communities**

Rendering helps protect the environment with lower greenhouse gas emissions than other disposal methods, decreased energy and water consumption, and more efficient processing technologies. While NARA recognizes the contributions of other technologies, when referring to protein, rendering has the lowest GHG emissions when compared to composting and anaerobic digestion.<sup>2</sup> All technologies must be incorporated in order to reach the goals set in the Strategy, but the utilization of the proper technologies applied to the proper renewable streams will allow for the fastest and most efficient approach to achieve these goals. Rendering reclaims billions of gallons of water that would otherwise be wasted or contaminated. The process improves water quality, naturally releasing water back into the environment through evaporation or returning it to streams and rivers according to federal, state, and local water standards. Reclaiming products that would otherwise be discarded decreases our food production footprint. It also reduces waste piling up in landfills as we reuse those co-products instead.

## **Progress Towards FLW Goals**

One key challenge mentioned in the Strategy is “obstacles to estimating food loss and waste and progress towards goals.” We share this concern. As the federal government has increased its funding to new organic recycling technologies and industries, it has come at the expense to traditional organic recyclers like the rendering industry. Subsidizing new technologies and industries allows the unfair advantage to collect raw materials that might have already been collected by the rendering industry. Counting this expansion as progress towards goals is not accurate. It is simply taking a supply stream from one organic recycler to another.

We respectfully encourage the agency to consider the benefits and efficiencies associated with a technology-neutral approach, which would not divert existing waste streams by artificially incentivizing certain technologies over others. We appreciate the opportunity to work with EPA, USDA, and FDA to ensure the measurement of progress towards the national goal is built on sound science that recognizes the concept of additionality.

## **Other Challenges**

NARA has been quietly addressing these same challenges for decades. For example, NARA has addressed limited outreach, education, and research funding by establishing the Fats and Proteins Research Foundation (FPRF). <https://fprf.org> FPRF was chartered in 1962 to establish a research program to enhance the usage of rendered animal products, improve processes used to make them, and develop novel applications. Over 600 research studies have been funded by FPRF since its inception. FPRF and Clemson University jointly established the Animal Co-Products

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<sup>2</sup> Gooding, C.H., and Meeker D.L.. 2016. Comparison of 3 alternatives for large-scale processing of animal carcasses and meat by-products. *Prof. Anim. Sci.* 32:259–270. doi: 10.15232/pas.2015-01487

Research and Education Center (ACREC) at Clemson University in 2004.

<https://www.clemson.edu/public/acrec> For example, a recent ACREC project utilizes feather meal as a contaminated site remediation tool and is being successfully deployed to superfund sites. We would welcome further cooperation and collaboration with the EPA, USDA, and FDA in expanding the organic recycling market through research at FPRF and ACREC.

### **Conclusion**

In closing, NARA appreciates the efforts of the EPA, USDA, and FDA to help prevent the loss and waste of food, and to strengthen interagency collaboration. We respectfully urge you to acknowledge the integral contributions of rendering to reducing food loss and waste and recycling organics in the Final Strategy. The rendering industry has been part of all four of these objectives at various levels since the 1930's.

Additionally, we encourage EPA to include rendering in its newly created Wasted Food Scale. We are concerned that the Scale and accompanying report did not incorporate or acknowledge rendering's significant contributions to FLW reductions. Rendering has long been included as part of EPA's original Food Recovery Hierarchy due to its role in preventing and diverting wasted food from disposal in a manner that provides tremendous benefits to the environment and to a circular economy.

Best Regards,

A handwritten signature in black ink that reads "Kent Swisher". The signature is written in a cursive, flowing style.

Kent Swisher  
President & CEO