Rendering and Sustainability

The rendering industry plays an important role in the sustainability of animal agriculture and the food system. Approximately 56 billion pounds of animal leftovers and recaptured cooking oil were rendered in the U.S. last year.

Instead of these by-products filling up landfills or used as soil amendments, renderers efficiently convert them into ingredients for a host of products ranging from high value animal feed to biofuel to personal care and industrial products. Without rendering, the many various products made with rendered ingredients would have to be made with other less sustainable, costlier inputs.

All U.S. landfills would be full in *four years* without rendering, posing serious public health and environmental problems.

While providing these essential services, renderers boost sustainability by reducing greenhouse gas emissions, conserving fuel and other natural resources, recycling heat from processing and contributing to their local economies and communities.

The Four Main Principles of Rendering Sustainability:

1. Produce safe animal food and ingredients for consumer/industrial products

2. Practice environmental stewardship and operate efficiently

3. Care for local communities and employees

4. Help feed a hungry world by providing nutritious feed ingredients for animal production by recycling responsibly

NRA works to promote understanding of the rendering industry's role in sustainability and to enhance the ability of renderers to operate. The industry does not support government policies that direct renderable raw materials to less sustainable treatment options, such as composting, anaerobic digestion or landfilling. EPA's Food Recovery Hierarchy lists rendered products as having higher recycling value than these other treatment options.

Principle 1: Rendering Produces Safe Animal Food and Product Ingredients

- All rendered products in the U.S. meet federal, state and local animal food safety standards. The industry also has its own rigorous Rendering Code of Practice.

Principle 2: Rendering Practices Environmental Stewardship

- Rendering sequesters *5 times* more greenhouse gas (GHG) emissions from the environment (such as carbon dioxide) than it emits.
- Rendering's contribution to carbon emission reduction in the U.S. and Canada is equivalent to removing more than 12 million cars from the road each year.
- Rendering evaporates *4 billion gallons of water* a year from animal by-products during cooking. This huge volume of water meets federal, state and local standards for quality and safety when returned to rivers and streams.

Principle 3: Renderers Care for Their Community and Employees

- Renderers in the U.S. invest more than $500,000 annually in research through the Fats and Proteins Research Foundation to improve rendering processes, products, and efficiencies.
- Rendering companies and their employees are longstanding members of their communities, improving the quality of life by volunteering and supporting local charities, providing jobs and offering essential recycling services for farmers, restaurants and food service.
- Without renderer pickup of used cooking oil, municipal sewer and wastewater systems can become clogged, resulting in millions of dollars in damage and repairs while compromising water quality.

Principle 4: Rendering Helps Feed a Hungry World by Recycling Responsibly

- Rendered fats and oils account for 30% of the feedstock used in biodiesel and renewable diesel refining in the U.S.
- It would take *6.3 million acres* a year of additional average quality U.S. crop land to replace rendered fats and proteins used for animal feed.
- The rendering industry recycles *4 billion pounds* a year of used cooking oil/grease from foodservice operations, much of which is used for biomass-based diesel production, representing *7.8 million acres* a year of U.S. average quality soybean land from which soy oil is produced.
- Recycled cooking oil is also used for animal food ingredients equivalent to the production of corn on *619,000 acres* of U.S. average quality corn land a year.
- The rendering industry recycles 2.3 billion pounds of meat and poultry from retail food waste a year that is used for animal food ingredients equivalent to the production of soybeans on *400,000 acres* of U.S. average quality soybean land.
- Rendered proteins are used for fertilizer when not suitable for animal food.

What Does Rendering Sustainability Mean to Me?

The average American eats 220 pounds of meat and poultry products per year. For every pound of meat and poultry eaten, another pound of by-products from the animal is not consumed. This means 220 pounds of by-products per person per year from those food animals is recycled by rendering. Each of the 328 million Americans would need 2,025 square feet (the size of an average house) of new crop land to grow ingredients that would replace rendered products. Unlike crops which require added water to grow, rendering returns 16 gallons (121 half liter bottles) of clean water per person a year to the environment.