

The International Magazine of Rendering

June 2015

# Render

## Physical Hazards in Raw Material



Mobile users, tap  
here to download a  
PDF of this issue  
to your device

### Challenges Continue for US Renderers

### Battle over Meat Scraps in California



Perfection is  
Doubling Your Profit



## Perfecting Particle Size

*The Sturtevant Whirlwind® Air Classifier creates high protein / low ash product from rendered meal to meet the demand for high digestibility.*

- Control ash in rendered meal to create more profitable products
- Easy maintenance with no screens to clean
- Designed specifically to meet the challenges of the rendering process



348 Circuit Street Hanover, MA 02339 • Phone: 800.992.0209 • Fax: 781.829.6515 • [sales@sturtevantinc.com](mailto:sales@sturtevantinc.com)

[www.sturtevantinc.com](http://www.sturtevantinc.com)



#### *Haarslev Business Areas*

- Protein
- Environment
- After-Sales and Service

## *Haarslev Industries After-Sales and Service*

With five locations and service trucks in North America Haarslev can assure our customers maximum protection against downtime, optimum equipment performance, large inventories with original OEM high quality metal wear parts and in-house rebuilds of pre-breakers and presses.

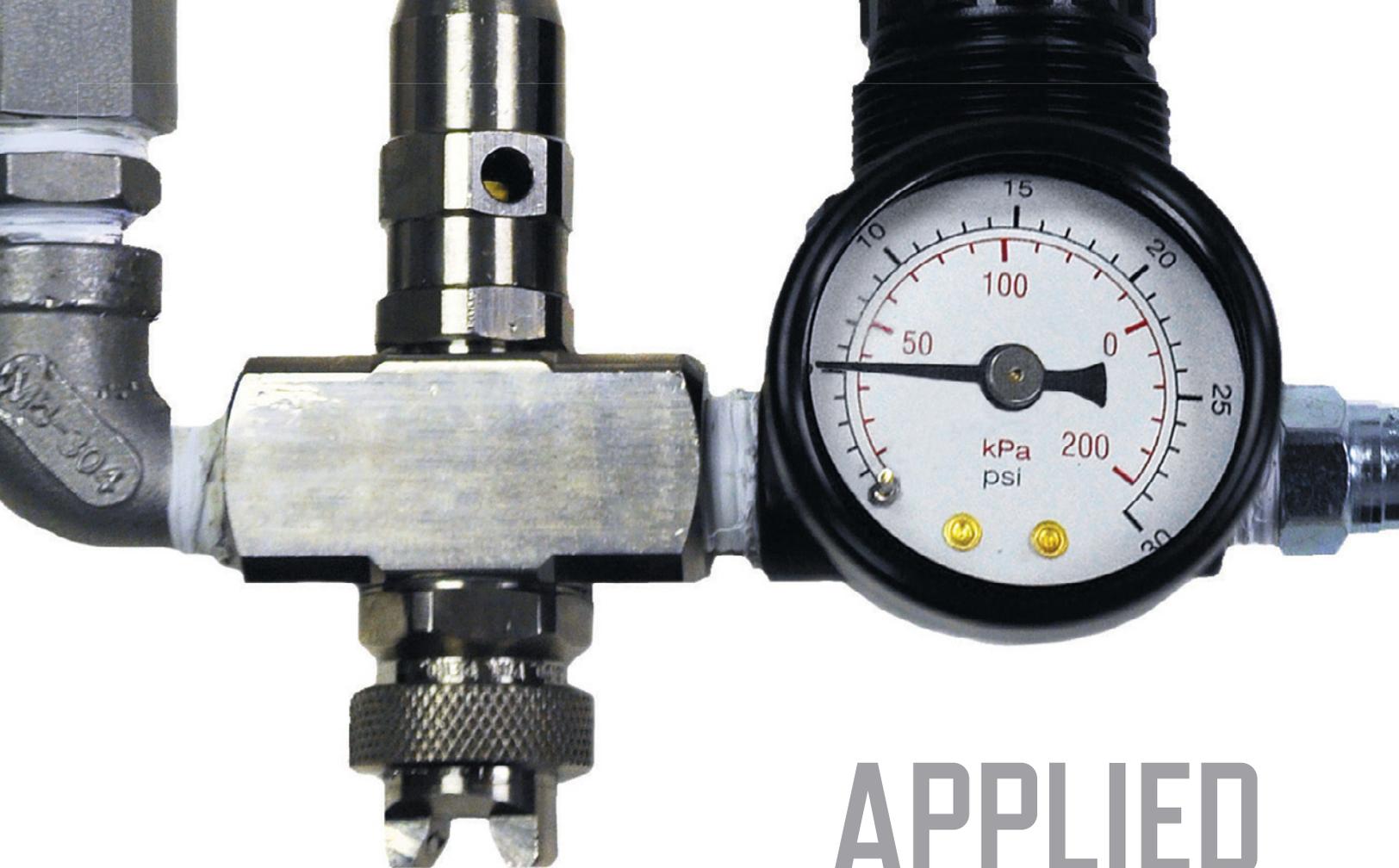


#### **Haarslev Inc.**

9700 NW Conant Avenue, Kansas City, MO 64153  
Tel. (816) 799-0808 • Fax (816) 799-0812  
E-mail: [info-usa@haarslev.com](mailto:info-usa@haarslev.com) • Web: [www.haarslev.com](http://www.haarslev.com)

**Greensboro, NC • Belleville, KS  
Perham, MN • Shellman, GA**





# APPLIED KNOWLEDGE

**At Kemin, we know what works and how  
to apply it. Best of all, we can prove it.**

Through our knowledge and experience, we have built valuable relationships that allow us to provide unique product solutions and services to the rendering industry.

From our Naturox<sup>®</sup> and PET-OX<sup>®</sup> Brand Antioxidants to custom application equipment to our Customer Service Laboratory, you can trust the Kemin brand to go above and beyond.

**Contact a Kemin rendering expert for more information.**

**1-877-890-1462**



INSPIRED MOLECULAR SOLUTIONS™



**WWW.KEMIN.COM**

# **ONKEN**

I N C O R P O R A T E D

*"Innovations That Protect Your Investment"*

## ***E-Z Install security lid Features:***

- ~Cleaner Design.***
- ~Lighter weight.***
- ~Better Screen.***
- ~Fewer locks.***
- ~Can now be installed  
"in the field".***
- ~Fits standard grease bins.***

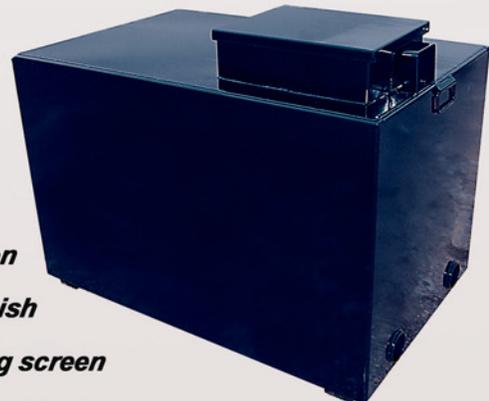


*shown  
folded*



**Grease Handling  
Equipment**

## ***Enclosed Grease Tank***



*~12 gauge construction*

*~Powder coat finish*

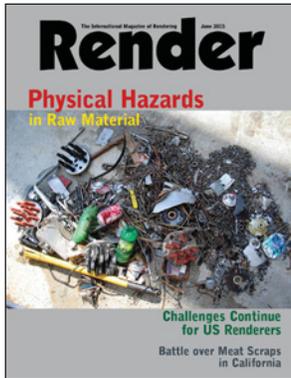
*~Secure locking screen*

*~Slides to side to pump*



*Proud member of the National Renderers Association*

**Go to [www.onkens.net](http://www.onkens.net) or contact us at  
309.562.7271 or [onkensales@onkens.net](mailto:onkensales@onkens.net)**



**On the Cover**  
A look at ways to control foreign material from suppliers and in the plant. **p. 10**

## Features

- 10 Physical Hazards in Raw Material**  
*Their source and control.*
- 12 Challenges Continue**  
*For US renderers.*
- 16 APPI Membership**  
*Continuous improvement.*
- 32 FDA to Review**  
*Feed ingredient definitions.*

## Departments

- 6 View from Washington**  
*Trade imbalances.*
- 8 Newsline**  
*Battle over meat scraps in California.*
- 18 From the Association**  
*Looking ahead with a new strategic plan.*
- 20 Biofuels Bulletin**  
*Proposed RFS volumes imminent.*
- 24 International Report**  
*Educating for positive change with "e-learning."*



- 26 ACREC Solutions**  
*Research shows unique uses for rendered products.*

- 28 Tech Topics**  
*New environmental regs remain a threat.*
- 30 Mark Your Calendar**
- 34 Labor and the Law**  
*Get ready, get set, go for hazard communication.*
- 38 People, Places, and...**
- 40 Classifieds**

## Editorial Offices

2820 Birch Avenue  
Camino, CA 95709

**Phone:** (530) 644-8428

**Fax:** (530) 644-8429

editors@rendermagazine.com

www.rendermagazine.com



**Editor and Publisher** Tina Caparella

**Associate Editor** Lindsay O'Connor

**Magazine Production** Sierra Publishing

Contact the National Renderers Association at  
500 Montgomery St., Ste. 310, Alexandria, VA 22314  
(703) 683-0155 Fax (571) 970-2279  
renderers@nationalrenderers.com  
<http://nationalrenderers.org>

*Render* (ISSN 0090-8932) is published bimonthly under the auspices of the National Renderers Association by Sierra Publishing, 2820 Birch Avenue, Camino, CA 95709 as a public service to the North American and global rendering industry. It is intended to provide a vehicle for exchange of ideas and information pertaining to the rendering and the associated industries. *Render* is distributed free of charge to qualified individuals upon written request. Publisher reserves the right to determine qualification. Periodical postage paid for at Camino, CA, and additional mailing offices.

© 2015 All rights reserved.  
Printed in USA

POSTMASTER: Send address changes to  
Render, P.O. Box 1319, Camino, CA 95709-1319.

# Renderitorial

April was a rough month for the rendering family as we again mourned the loss of two great individuals.

Dennis Griffin, patriarch of the Griffin family and its rendering operations right through a merger with Darling International Inc. in late 2010, passed away in early April. For many years, he was a pillar in the National Renderers Association (NRA), fighting for the good of rendering during the dark regulatory days of bovine spongiform encephalopathy. His passion for an industry he grew up in was evident in his dedication to the family business and involvement in rendering organizations. He believed in the importance of research to find new markets for the valuable commodities renderers produced, serving as chairman of the Fats and Proteins Research Foundation from 1993 to 1994.

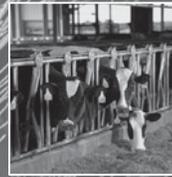
Griffin was also one to encourage and show his generous nature with words and actions. Besides being involved in and a charitable supporter of various community groups, he often scripted kind letters to those he felt deserved recognition for their dedication to an industry he so loved. This editor was on the receiving end of those expressions of gratitude a few times, including his enjoyment of the thoughts and opinions in this editorial of what our industry does in its contribution to American society. Ah, Dennis, thank you. This editor is grateful to call him a colleague and friend. He will be deeply missed.

Another loss to the rendering industry is the passing of Mark McMahon in mid-April at the young age of 55. He spent most of his career working at Cargill Beef, beginning in beef processing before jumping to the rendering side of the company. That move 15 years ago appeared to be his calling as McMahon also took pride in the good the industry provided to animal agriculture. He too became involved in NRA, serving on its executive committee from 2006 to 2009 providing insight and guidance from a packer-renderer's point of view. Mark also will be truly missed around the rendering table.

Read more about these men, and several others whom we lost recently, in People, Places on page 38. **R**



**CONESTOGA-ROVERS  
& ASSOCIATES**  
Agricultural Services



## Your Partners in Agriculture

### Specialized Services:

- Air Quality/Odor Management, and Greenhouse Gas Reporting
- Comprehensive Facility Planning, Design, and Engineering
- Industrial Hygiene/Safety and Health
- Monitoring Well Installation, Sampling, and Reporting
- Nutrient Management Plans/Waste Management Plans
- Siting/Construction/Oversight/Permitting
- Wastewater Transfer, Storage, and Treatment Design

*CRA is a proud member of the National Renderers Association*

3,000 staff in 100+ offices to serve the rendering industry

phone: 888.572.5885

email: mbeerends@CRAworld.com

REGISTERED COMPANY FOR  
**ISO 9001**  
ENGINEERING DESIGN

www.CRAworld.com

WORLDWIDE ENGINEERING, ENVIRONMENTAL, CONSTRUCTION, AND IT SERVICES



## INDUSTRIAL STEAM

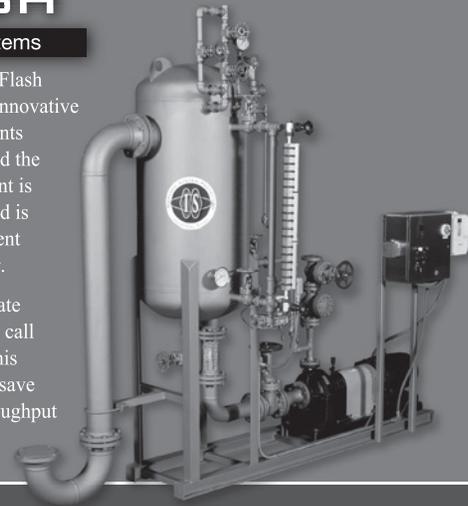
• PERFORMANCE • QUALITY • EXPERTISE  
• RESPONSIVE • TECHNICAL

## ZERO FLASH

### High Pressure Condensate Systems

Industrial Steam first introduced the Zero Flash over 40 years ago. We continue to create innovative methods of saving energy in rendering plants through the conservation of condensate and the recovery of lost flash steam. Our equipment is built with rugged, heavy duty materials and is designed to withstand the harsh environment directly adjacent to a cooker or evaporator.

If you are currently sending your condensate to a vented tank or a pressurized deaerator call Industrial Steam for an analysis to see if this equipment is right for your plant. It could save 10% of your fuel bill and increase the throughput of existing equipment.



## DEAERATORS AND CONDENSATE RECOVERY EQUIPMENT

1403 SW 7th Street, Atlantic, Iowa 50022

(888) 783-2615 Tel (712) 243-3440 Fax [www.Industrialsteam.com](http://www.Industrialsteam.com)

## Trade Imbalances

Trade agreements of varying stripes litter the halls of Washington, DC, these days. President Barack Obama's administration, with an eye on programs for which the president wishes to be remembered once he has left office (i.e., the Obama legacy), has designated trade as both a stand-alone issue and a significant component of the White House strategy to accelerate economic recovery and growth.

The three legs of the trade legacy stool are the Trans-Pacific Partnership (TPP), the Transatlantic Trade and Investment Partnership (TTIP), and the bilateral move to normalize not only diplomatic relations, but also trade relations with Cuba. All hold promise for the rendering industry if these prospective pacts survive the political and policy battles currently raging around all three.

This trio of trade treaties arguably could not come at a better time. The United States (US) economy continues to sputter, growing at an annualized rate of just 2.2 percent in the fourth quarter of 2014 and a meager 0.2 percent in March 2015, according to the Bureau of Economic Analysis. Markets were rocked in early May when the Department of Commerce reported the US trade deficit in March was the highest since Obama took office, coming in at a whopping \$51.4 billion, 43 percent higher than the trade deficit in February 2015. Weather, labor disputes at West Coast ports, and a strong US dollar abroad contributed to the deficit increase, but expansion was still greater than economists expected.

The report showed US imports of goods and services increased 7.7 percent, overwhelming the 0.9 percent rise in overall US exports. Agricultural trade's consistent positive contribution to the overall balance of trade has long been a source of pride to the White House, no matter who is president. US agricultural exports have been larger than agricultural imports since 1960, generating a surplus in agricultural trade, offsetting the persistent deficit in nonagricultural US trade.

US agricultural export expansion largely explains why all three prospective trade deals are important. Domestic ag market demand is at a saturation point and growth in agriculture – grain and oilseed production along with livestock/poultry/dairy products and their inputs, including feed and ingredients like rendered products – is predicated upon finding overseas buyers for US production.

Chief among the political hurdles is trade promotion authority (TPA), also known as fast track authority for the president. Since 1974, Congress has enacted TPA, defining US negotiating objectives/priorities for trade agreements and setting consultation/notification requirements for the president to follow throughout the negotiation process. At the end, Congress gives the agreement an up or down vote, without amendment. TPA expired in 2007 at the end of the George W. Bush administration; Obama didn't seek TPA authority until last year.

It was assumed Republicans might deny TPA to Obama to block prospective trade victories, but when the GOP took

control of Congress in 2014, the new leadership strongly urged the White House to formally seek TPA and deliver the Democrat votes to enact it. Yet, the Democrats oppose TPA for Obama. Supporters say without TPA, TPP will die due to trade partner distrust that US negotiators can deliver treaty commitments without congressional interference.

TPP is a regional trade deal representing about 40 percent of the world's gross domestic product (GDP). The proposed agreement began in 2005 as the Trans-Pacific Strategic Economic Partnership Agreement. Participating countries wanted a deal by 2012, but agriculture and intellectual property hurdles blocked success. TPP was born when a broad outline of a prospective deal was announced on the sidelines of the Asia-Pacific Economic Cooperation ministerial in late 2011.

"TPP is a proposed regional free trade agreement negotiated among the US, Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, and Vietnam," wrote the Congressional Research Service. "US negotiators describe and envision TPP as a 'comprehensive and high-standard' [treaty] that aims to liberalize trade in nearly all goods and services, and includes rules-based commitments beyond those currently established in the World Trade Organization (WTO)...the TPP potentially could eliminate tariff and nontariff barriers to trade and investment among the parties...Congress has a direct interest in the negotiations, both through influencing US negotiating positions with the executive branch, and by considering legislation to implement any resulting agreement."

All nations agreed to pursue elimination of tariff and nontariff trade barriers when accepted as part of the negotiations. The relatively smooth path to completion in late 2013 was complicated when Japan and Canada refused to eliminate some tariffs. For Japan, it was a list of seven sacred commodities it sought to protect, including beef, pork, dairy, rice, and various grains and oilseeds; for Canada, the protected list was shorter – dairy, poultry, and eggs. Japan has since agreed to lower double-digit tariffs on US ag imports to single digits, but reserves the right to increase the tariffs if there is a surge of imported products. Canada is holding tough.

For agriculture, a tariff-free Pacific Rim is a gold mine of prospective and expanded markets, particularly for grains, meat, and meat-related products. So critical is TPP to agriculture and so frustrated are US commodity groups with Japan and Canada's foot dragging that most farm/ranch coalitions formally told Congress to dump Japan and Canada out of the agreement for violating the rules of negotiation. While these same ag groups have withheld any public opinion of what has been negotiated so far in TPP, they are in unanimous support of TPA.

TPP and TPA are now inextricably linked, at least politically. It is the president's party that pushes back hard, with no less than former Senate Majority Leader Harry Reid (D-NV) vowing

TPA and TPP will never see floor votes if he gets his way. Reid is public in his distaste for trade treaties, stating there are more pressing matters that need Senate attention.

On the House side, Representative Rosa DeLauro (D-CT) leads the opposition to TPA, claiming the White House has ignored Congress. She contends the White House has not consulted with Congress on US labor protections, human rights requirements, or environmental protections. In early May, DeLauro upped the political ante when she and her allies released a statement opposing both TPA and TPP.

“We have concluded the TPP will not contribute to economic growth, create additional American jobs or raise wages, or set high standards for labor rights or the environment...Likewise, we have carefully reviewed the proposed [TPA] bill...[and] oppose the bill because it merely locks in the unacceptable status quo,” the statement said.

Representative Collin Peterson (D-MN), ranking member of the House Agriculture Committee, will not commit to either TPA or TPP unless Canada drops its protective tariffs on dairy. He says the North American Free Trade Agreement so disadvantaged US dairymen it allowed Canadian dairies to become so profitable they have been able to buy US dairy cooperatives.

The president had hoped to have a tentative final TPP deal in hand when Japanese Prime Minister Shinzo Abe visited Washington, DC, in late April. Both men have pinned political futures on a successful TPP outcome. Now Canada, smelling political blood in US waters, refuses to finish TPP negotiations with the United States without TPA in Obama’s hand.

#### TTIP or TAFTA?

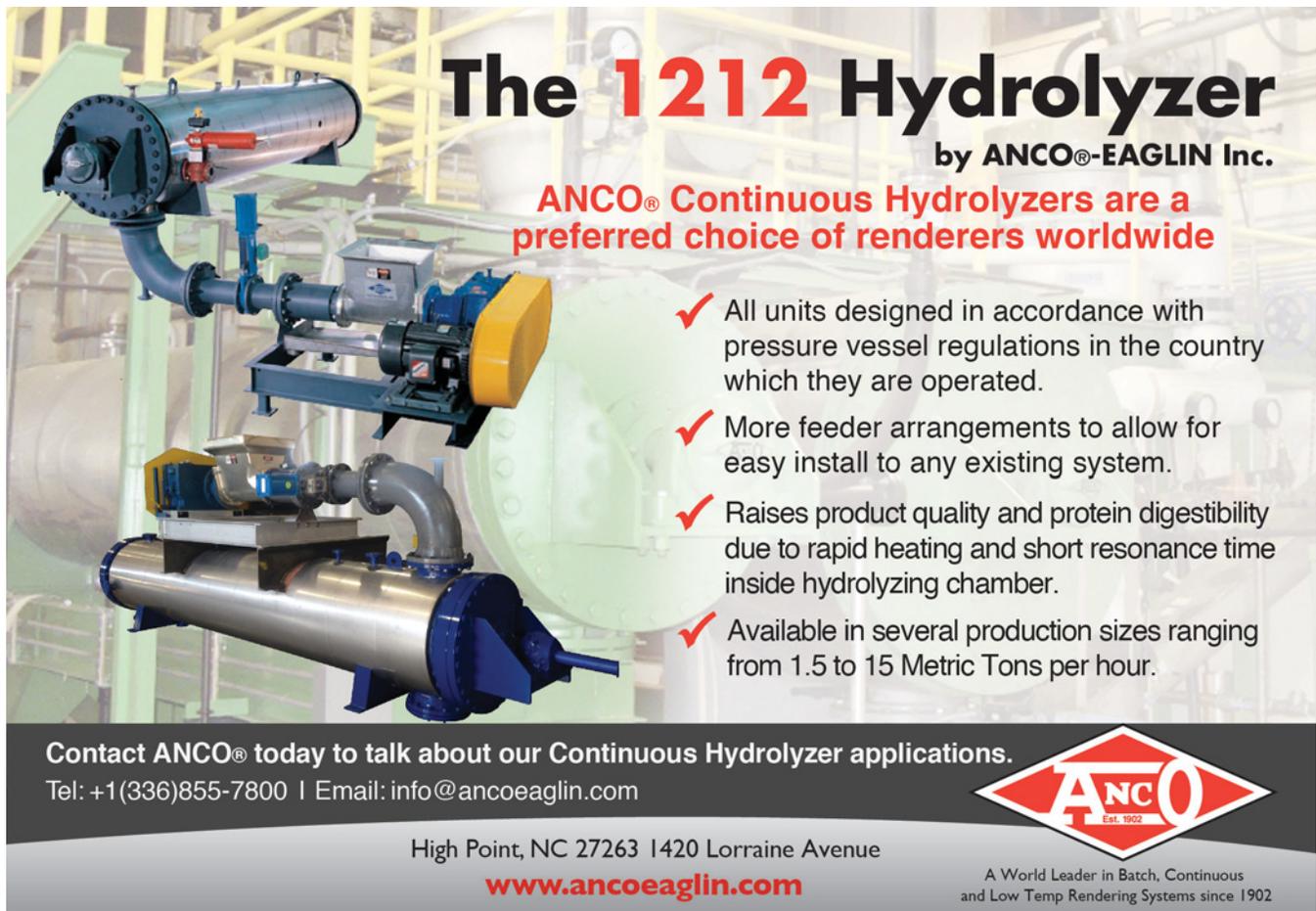
Trade insiders are most cynical about the successful outcome of a United States-European Union (EU) trade deal. While optimists point to the recently finalized Canada-EU treaty, US cynics contend cultures and philosophies both political and social of the two superpowers are so firmly ingrained, a full-blown free trade deal is nearly impossible.

If successful, TTIP will literally integrate the United States and EU on the commerce front, particularly given the EU economy is shakier than the United States. The two economies represent half of global GDP and a combined market of 800 million consumers. The United States and EU trade nearly \$2.7 billion a day, with \$4 trillion invested in each other’s economy, supporting more than 13 million jobs. A successful free trade pact would be the largest in history.

While the optimistic goal remains to have a draft treaty in hand by the end of this year, the bloom is off the economic rose. The EU precautionary principle regarding animal drug use and food safety – coupled with citizen attitudes about biotechnology, food processing, animal welfare, and the fundamental elevation of consumer concerns over the economic benefits and long-term financial gain for both sides – are starting to dominate public discussion, and that discussion is being heard at the negotiating table.

There is broader and deeper concern in the EU over how a Transatlantic Free Trade Agreement (TAFTA) might affect day-to-day quality of life in the respective nations. European consumers evince an almost inborn distrust of technology

*Continued on page 22*



# The 1212 Hydrolyzer

by ANCO®-EAGLIN Inc.

**ANCO® Continuous Hydrolyzers are a preferred choice of renderers worldwide**

- ✓ All units designed in accordance with pressure vessel regulations in the country which they are operated.
- ✓ More feeder arrangements to allow for easy install to any existing system.
- ✓ Raises product quality and protein digestibility due to rapid heating and short resonance time inside hydrolyzing chamber.
- ✓ Available in several production sizes ranging from 1.5 to 15 Metric Tons per hour.

Contact ANCO® today to talk about our Continuous Hydrolyzer applications.  
Tel: +1(336)855-7800 | Email: info@ancoeaglin.com

High Point, NC 27263 1420 Lorraine Avenue  
[www.ancoeaglin.com](http://www.ancoeaglin.com)



A World Leader in Batch, Continuous and Low Temp Rendering Systems since 1902

# Battle over Meat Scraps in California

Challenges continue to mount for California renderers, one of which is a possible loss of meat scraps collected from supermarkets. Waste management companies and the state's Department of Resources Recycling and Recovery, or CalRecycle, are attempting to collect the material as part of California's increasing solid waste diversion efforts that often go to anaerobic digestion or composting. Under state law, if a company processes waste meat material, it must be registered as a renderer with the California Department of Food and Agriculture (CDFA).

Dr. Douglas Hepper of CDFA told Rendering Industry Advisory Board (RIAB) members at an April meeting that he and state veterinarian Dr. Annette Jones have been discussing this issue with the governor's staff and CalRecycle for years, providing an opportunity to educate both about rendering. The discussions have recently escalated due to the passing of Assembly Bill 1826 last year requiring businesses that generate a large amount of organic waste to arrange for recycling services of that organic waste, which as defined in the bill includes food waste. The provisions in the bill take effect April 1, 2016.

"This issue is not going away," said Hepper. CDFA submitted comments on the bill, including that the department would require funding for two additional staff members to monitor the recycling of food waste. The bill was recently pulled out of the governor's budget hearing committee for further review.

"Rendering is getting sucked into California's solid waste world and all its money and politics," stated Tad Bell, California Grain and Feed Association, who lobbies in Sacramento on behalf of California renderers.

Dr. Ross Hamilton, Darling Ingredients Inc., noted that meat waste has been diverted to rendering for many years so it should not count toward the state's solid waste diversion goals under AB 1826. RIAB Chairman Michael Koewler, SRC Companies, said that although the California Retailers Association supports meat waste going to rendering and meetings with the California Environmental Protection Agency have helped to keep the status quo, he believes a peer-reviewed white paper to further validate the value of rendering waste meat products is necessary to further educate lawmakers, CalRecycle, and others.

Hepper updated RIAB members on a CDFA-funded project being done at the University of California, Davis, that will assess the microbial safety of rendered products. CalRecycle was provided the scope of the project at its request and in turn recommended the project evaluate pathogen levels in discarded food materials from United States Department of Agriculture processing facilities and slaughterhouses as well as retail establishments, including supermarkets, big box stores, small grocery stores, butcher shops, and delicatessens. CalRecycle would also like to see the project evaluate current rendering processes (or other heat treatment processes) for

pathogen control and review the destruction efficiency of certain processes for pathogen control, including rendering, composting, anaerobic and aerobic digestion, dehydration, and mechanical processing (i.e., shredding, grinding, pressing).

RIAB members were also updated on CDFA Inedible Kitchen Grease (IKG) Program activities, starting with investigator Paul Roos who announced that one grease theft case ruling did not go in the department's favor. The violating company was cited for receiving IKG from an unlicensed transporter or collection center and multiple other violations under the California food and agriculture code. Roos explained that IKG was being transferred in the driveway of a residence in Southern California last year and despite a lot of evidence that included videos of IKG theft, the civil hearing officer ruled in favor of the accused, thus allowing the company to receive its 2015 registration under the IKG program.

A second case against a different company for similar violations resulted in the company's IKG registration being denied until May 1, 2015, and a third related case is awaiting a hearing decision.

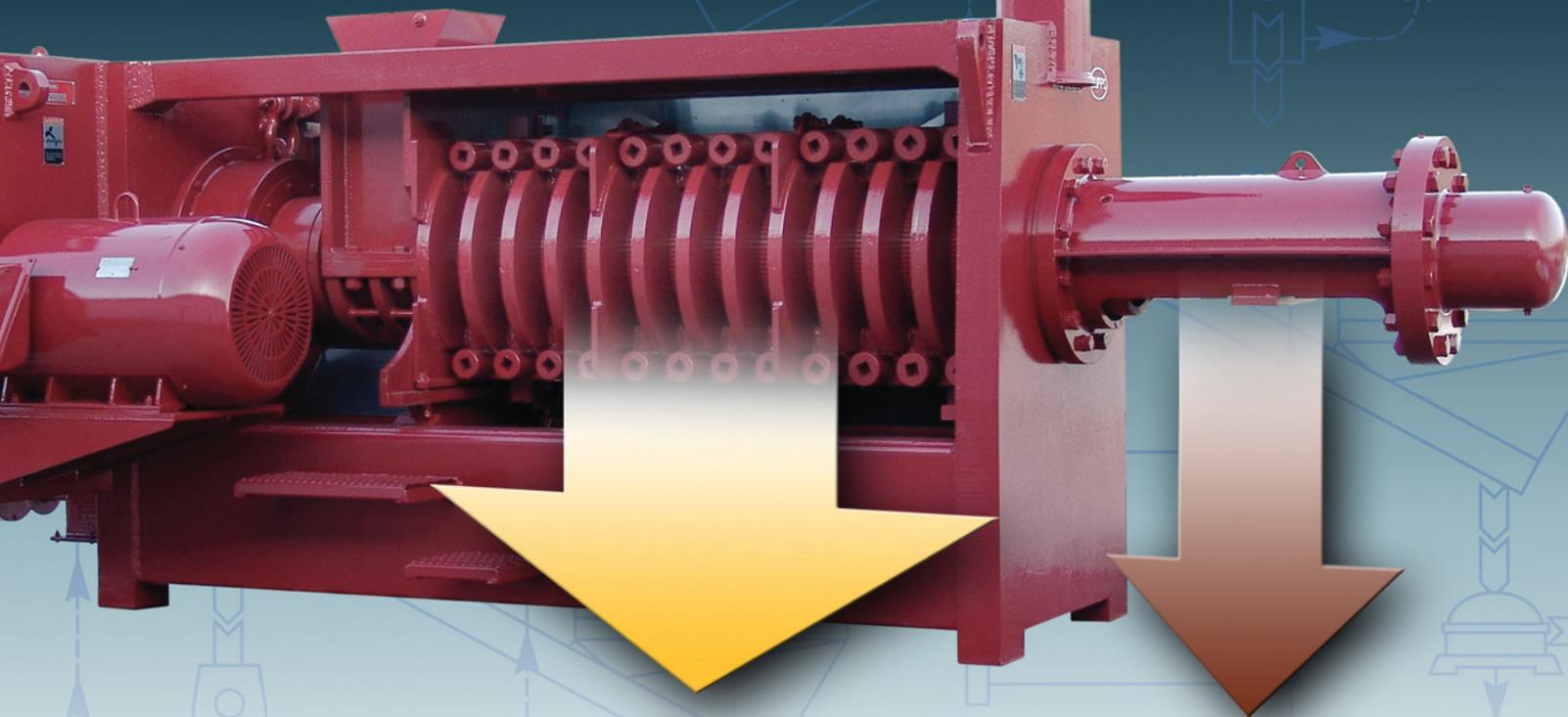
## Renderer Goes Live

*Sacramento Rendering Company in California opened its doors to a local news crew in mid-May to show how used cooking oil is collected and recycled into renewable energy. The Good Day Sacramento live morning show provided its viewers a glimpse into this "dirty" but beneficial side of rendering. A link to the videos are on Render's website at [www.rendermagazine.com](http://www.rendermagazine.com).*

In March, the California Highway Patrol office in Livermore contacted CDFA after some confusion over the program's manifest system. CDFA investigator Paul San Gregorio provided training to area law enforcement officers who are now issuing notices to appear for various program violations, such as no decals on IKG trucks and recordkeeping violations. The Redding office is up next for manifest training. San Gregorio also shared information on an individual who has been seen stealing IKG in the San Francisco area and encouraged renderers to forward CDFA any evidence on the illegal activity so law enforcement can take appropriate action.

RIAB members discussed some confusion over a California Penal Code section that states "a grease waste hauler shall not transport grease removed from a grease trap or grease interceptor in the same vehicle used for transporting other waste, including, but not limited to, yellow grease, cooking grease, recyclable cooking oil, septic waste, or fluids collected at car washes." The code was put in place years ago by the state's district attorney to prevent illegal disposal of interceptor grease. Some haulers want to be able to use the same vehicle for both interceptor grease and used cooking oil after proper clean out. The Pacific Coast Renderers Association will reach out to the state agency to see about amending the code. **R**

# Extract more **fat**



**Dupps Pressor® with HCPR**  
yields up to **110 lbs. more**  
**high-value fat** every hour.

**Up to 25% less fat**  
**residual in the crax.**

## **The Dupps Pressor®** with the new **HCPR™ Shaft**

Lower your fat residuals.  
Learn how at [www.dupps.com](http://www.dupps.com)  
or (937) 855-6555.



- You can't afford excess residual fat. A Dupps' Pressor screw press with the new Hybrid HCPR (High Compression Press Release) shaft can dramatically lower residuals in most rendered products.
- The HCPR combines high compression with a release/re-compression feature—just like squeezing a sponge twice releases more moisture, the HCPR compresses material twice to release more fat.
- In many cases, the HCPR Shaft can be retrofitted to your existing Pressors.



The Dupps Company • Germantown, Ohio • U.S.A.

© 2015 The Dupps Company



# Physical Hazards in Raw Material

## Their source and control

By Charles Starkey, PhD

Whenever discussing food safety, it can be difficult to know exactly where to start so this discussion on physical hazards in rendered products will begin with the raw material source and traverse the rendering process. This article is in no way all inclusive of the problem of foreign material entering the rendering process, but simply a starting point from which to base a hazard control system within a rendering operation.

The origination of most foreign material that renderers contend with comes from raw material suppliers. It is uncertain at this time whether or not many of these suppliers will be required to follow the pending regulations included in the Food Safety Modernization Act (FSMA). However, it will still be the rendering and feed industries' responsibility to reduce or eliminate the risks posed by foreign material. Within the FSMA regulations, feed ingredient suppliers and feed manufacturers will have to maintain an approved supplier list. With that knowledge, here are a few questions to pose:

1. Does your company currently audit its suppliers? Some organizations spend time on this; however, for many that conduct route pick-ups, it is virtually impossible. When feasible, suppliers should be formally audited a minimum of once a year. Just as with any audit, the results must be communicated with management of the supplier and those involved in the process of generating the raw materials.

2. Does your company contractually obligate its suppliers to ensure product is not shipped contaminated with foreign material? It is important that every supplier sign some form of supply agreement that includes language prohibiting the delivery of adulterated materials to the rendering facility. At a minimum, it educates the supplier on the necessity to remove or prevent foreign material from the raw material stream.

3. Does your company perform training and education with its suppliers? This can sometimes be the most frustrating part of any foreign material program. Many raw material suppliers are involved in the production of food for human consumption so the last thing they want to consider is the by-product stream. There are many ways to help deliver the message to suppliers, such as posters, pictures, and placards placed around raw material collection points. Training seminars and instructional videos are also available and can help spread the message. Most employees at supplier companies have no idea what the raw materials are used for, often thinking they are sent to waste disposal. If proper signage is not present to specifically explain that the receptacles are not for waste, then how is the supplier's personnel supposed to understand? Many of these items seem simple, but it is usually the simplest of tasks that can help the most.

Here are some things to ask and look for: Are the proper screens used at the supplier? Are flues covered at all times?

Are screens in trap lines cleaned frequently? Are receptacle cans placed where trim and product can be placed into proper red or yellow containers and trash into grey cans? These seem extremely straightforward, but oftentimes facilities do not have enough disposal containers in appropriate locations. Does the supplier have a hazard analysis and critical control point or FSMA plan in place for the raw material product? Has a raw material specification document been developed?

The most beneficial step the rendering industry can take is to work with suppliers to make certain they understand the needs and wishes regarding raw materials. Explain that every piece of foreign material, including a glove or apron, can shatter and contaminate several tons of finished product that could then contaminate several tons of animal feed. The most important thing to realize in this effort is that the sharing of these messages and education programs can never, ever stop and must be ongoing with dedicated personnel to handle this. Employee turnover, among other issues, requires that suppliers be continually reminded to eliminate sources of foreign material.

### Rendering's Role in Removing Foreign Material

The following are some suggested procedures to assist in eliminating foreign material from the rendering process stream. This is not a complete list, but a few suggestions that can help.

Many individuals in the upper levels of management and operations may say, "We have heard and tried all of these before." That may be the case, but what about newer employees? Do they even understand the importance of quality? Has this sentiment been adequately expressed within and throughout the organization? Everyone must be involved in any good quality system in order for it to work. If one person is not thinking about quality in their position, it could lead to contamination and possibly a recall situation that can get very expensive very quickly. It is understood that implementing more security measures can cost both money and time as well as make the process more difficult, but if the manufacturing of animal feed ingredients and other products was easy, then everyone would be in the business. It is vital that each individual organization be responsible for the removal or elimination of any physical hazards that are received prior to shipping these items out as finished products. Each rendering facility, and not others in the feed chain, is ultimately responsible for removing foreign material so implementing more standard procedures will ensure this is accomplished.

When receiving raw materials at the facility, it is essential to evaluate product prior to placing it into the process stream. Is every load that is delivered to your facility inspected? If

not, be sure to inspect raw materials, when possible, prior to them being placed into a receiving bin or tank. Solid raw materials received at rendering facilities are often wet, making it extremely difficult to remove foreign material with the use of screens.

The next decision is what to do if the load is contaminated. Should the load be rejected? (This is probably the best idea going forward.) Is the foreign material incident documented with paperwork and pictures? Is the raw material supplier notified? Are records kept and evaluated as to frequency of adulterated products received from suppliers? Are these records shared in formal meetings with suppliers? It is always best to reject a heavily contaminated load prior to receiving it into a facility. However, there are secondary operational processes that can remove foreign material downstream if necessary.

For liquid materials, it is important to use as many staged screening techniques as possible. Placing different sized screens at receiving prior to product being pumped into holding tanks can help protect equipment. This is also a good place for a trap of some sort to catch heavy items and remove them from the flow. These screens and traps must be checked and maintained frequently. The savings in downtime of broken production equipment can easily overcome the extra measures put in place.

Once the raw materials have been put into the process stream it is then the obligation of the rendering facility to remove any foreign material present or any that may be introduced by the facility itself. One common way to divide foreign material is to separate the contaminants into two segments: hard, such as metals and rocks, and soft, including glass, plastics, and wood.

One of the major contaminants for the rendering industry is metal. Raw material suppliers use processes that optimize, meaning the processes are heavily reliant on metal conveyances to move product through the system. These metals can break or come apart and end up in raw materials. There are several places along the rendering process line that can employ magnets, metal traps, and metal detectors to assist with removal of these metal objects. A facility cannot have too many magnets and traps in its system. It is best to utilize high affinity rare-earth magnets that have the capacity to remove different metals. It is recommended that magnets be pull-tested at least once annually, with rotary and automated self-cleaning bar magnets the preferred choices whenever possible. (Yes, these are more expensive, but in the total scheme of equipment and processes, the cost really is not that much when compared to a damaged cooker shaft or broken press.) Flowing raw materials over magnets and through metal traps can help remove metals prior to the initial grinding or cooking process. The more metal that can be removed at this point, the better at being able to reduce potential damage to processing equipment.

Once raw materials are cooked, the process of removing foreign material changes. The fats can be cleaned by using magnets, metal traps, and staged screens prior to centrifugation or polishing. The meal (or crax) products are dry and easier to convey thus making it simpler to remove both hard and soft foreign materials from this stream. Prior to any grinding or screening and sizing of material, the crax are flowed over

a magnet. Preferably using a two-stage grinding system, a hammer mill or cage mill with a larger screen opening will initially help reduce the size of the crax, which can then be run across screening equipment with a drop-out trap at the end of the screen allowing heavy materials to be removed from the flow. A cyclone air assist system at this location can also help remove lighter foreign material. The remaining crax can then be processed through a hammer mill with proper-sized screening to achieve final desired grind size. The hopes are that at the point where the final screening-sizing process is conducted, most all the foreign material is removed or at least ground to a size that will present no potential hazard.

The need to prevent the introduction of foreign material from the rendering process itself cannot be stressed enough. Ensure employees are adequately trained to not place any foreign material into the process stream. It is also essential to record and minimize all potential soft contaminants from a facility. A map, or diagram, of the location of every knob, indicator light, overhead light, gauge, watch glass, etc., may be tedious to record, but can be a valuable tool. Once it is realized just how much of these materials are actually present in a facility, it becomes easier to check them periodically and remove if necessary. Proper maintenance of equipment is also needed to prevent contaminants as is proper care, cleaning, use, and storage of tools to ensure they do not enter the system. Selecting tools that do not splinter or break, such as some of the poly composite-handled tools, may also help.

Finally, for liquid finished products, metal traps and screens at loadout will help remove any foreign material that may have been introduced in the rendering process. For dry products, magnets and metal detectors will help remove any hard or metal contaminants introduced. Contrary to popular belief, metal detectors can be used in the rendering industry and some operations have had great success with them. However, they take a lot of time and effort to set up and adjust correctly for these types of products. Another possible method that has not been previously used in the rendering industry that may be worth evaluating is photographic-, light-, or laser-based foreign material detection. These can be tuned to spot both soft and hard foreign materials based on the different color or composition compared to the finished product. This process is currently being applied well in the milling industry and could also be established in the rendering industry.

In closing, it is important to remember that each facility is responsible for controlling foreign material. It will take the dedication of personnel, time, and money to ensure that compliance is achieved. Not only is it required in the new FSMA regulations, but removing foreign material is the right thing to do. There is never any reason to place humans or animals at risk from the feed ingredients manufactured in rendering facilities. **R**

*Charles Starkey received his bachelor of science and master of science degrees from Arkansas State University, and his PhD from Kansas State University. Most recently, he was director of technical services at American Proteins Inc. responsible for quality assurance, quality control, regulatory, analytical services, and customer support and compliance. Previously, Starkey worked with DSM Nutritional Products and was a nutrition and production management consultant.*

# Challenges Continue for US Renderers

By Tina Caparella

Members of the National Renderers Association (NRA) convened in Chicago, Illinois, in April to examine export markets, conduct business, and strategize for their future.

One highlight of the annual spring meeting was the summation of months of strategic planning by a number of NRA members representing both large and small companies to determine the association's best role to serve its members over the next five years. It was agreed that industry consolidation, new technologies, next-generation leadership, and changing consumer and government demands create increasing challenges for renderers to remain profitable. Key takeaways from the strategic planning were that all renderers are in this together, sustainability is critical to the industry's suppliers and customers/brands, and that although rendering is sustainable, NRA needs to help define this new terminology for its members.

"Sustainability is not a buzz word, it is an awakening," said NRA Chairman Dr. Ross Hamilton, Darling Ingredients Inc.

"Millennials think of environmental and social issues long before economic issues and so must we," added Gus Wintzer, G.A. Wintzer and Son Inc. "If the meat industry is not aware of rendering's value, what about the general public?"

Kim Broekemeier, Tyson Foods, one of the strategic planning committee members, believes the rendering industry needs to tell its story. Tim Carlson, Hormel Foods LLC, noted that plans help focus on the right tasks and challenged NRA staff and members to take the next step to move forward with NRA's strategic plan (see From the Association on page 18).

NRA committees addressed various issues, beginning with the Animal Protein Producers Industry (APPI) Committee, which was originally established as a stand-alone group in the mid-1980s to educate and help rendering facilities with *Salmonella* control. That mission continues today, although now as a committee within NRA, and also provides a third-party certification program that has become a standard for the rendering industry. APPI is evaluating an online course

proposed by Kansas State University that will take current educational materials presented in person at various locations annually and create an online program for greater outreach. The cost to set up the course is estimated at \$10,000 with price per participant projected to be \$260.

Biofuels Committee Chairman Al Rickard, Rothsay, said the last six months have been the toughest market for the biodiesel industry that is, "unfortunately," linked to government policy. He went on to say the future of the Environmental Protection Agency's Renewable Fuel Standard is in jeopardy, not to repeal it, but to remove mandatory increasing levels of production and set volume obligations to actual capacity.

Dr. David Meeker, NRA scientific services, informed the Feed Regulation Committee that the number of new porcine epidemic diarrhea virus (PEDv) cases are about half of what they were last spring, but that high pathogenic avian influenza (HPAI) is currently spreading fast, basically "dropping out of the sky" as the virus is being spread by wild birds. Meeker announced that research done four to five years ago shows the rendering process and temperatures kill the avian influenza virus. He then informed the committee that Food Safety Modernization Act rules are expected to be finalized by July 31, 2015, and most renderers will have to comply one year later, by August 1, 2016.

The Legislative Committee discussed a bill passed in the New Jersey legislature but later vetoed by Governor Chris Christie that would have further regulated used cooking oil recycling in the state, such as adding recordkeeping requirements and an annual registration fee, and imposing civil fines. NRA had urged Christie to sign the bill, which was supported by the New Jersey Restaurant Association. An important piece of national legislation being watched by renderers is an effort to allow individual states to raise the federal vehicle weight limit to 97,000 pounds for vehicles equipped with a sixth axle for travel on interstate highways. Current federal law sets the weight limit at 80,000 pounds for five-axle vehicles, limiting



From left, Tim Guzak, Sanimax, discusses the NRA strategic plan alongside fellow committee members Doyle Leefers, National Beef Packing LLC; Ross Hamilton, Darling Ingredients Inc.; Kim Broekemeier, Tyson Foods; Tim Carlson, Hormel Foods LLC; and Gus Wintzer, G.A. Wintzer and Son Inc.

trucks that carry heavier loads. NRA has joined the Coalition for Transportation Productivity to support the legislation.

NRA's International Market Development Committee met over two days to address diverse trade and export matters. Dr. Kristin Schmitz, United States (US) Department of Agriculture's Animal and Plant Health Inspection Service (APHIS), declared "the world of trade today looks a lot different than it did in 2003," when the United States saw its first case of bovine spongiform encephalopathy (BSE). She said that APHIS' role is to get protocols in place using science-based decisions set by the World Organization for Animal Health, or OIE, and animal disease challenges that restrict trade of rendered products include meat and bone meal due to BSE, porcine spray-dried plasma because of PEDv, and, most recently, poultry and feather meals due to HPAI. Schmitz noted that HPAI export bans are all over the map, with some countries imposing US-wide restrictions while others are state specific. Some countries are also prohibiting cooked poultry products despite international guidelines that heat treatment kills HPAI.

Schmitz next turned her attention to Europe, noting that used cooking oil is exportable to some European Union (EU) members for biodiesel with hopes that discussions will further open this market. She shared that APHIS is working to remove the need for inspection of US poultry and porcine rendering facilities in Mexico's rendering regulation, the US small ruminant rule should be finalized by the end of September 2015, and limited resources are a challenge at APHIS so the rendering industry needs to prioritize its market needs.

Ryan Standard, The Jacobsen, described the "new" tallow market as tighter supplies and cheaper alternatives leading to weakened demand, especially in export markets. February 2015 saw the lowest US cattle population, at 2.1 million head, since February 1964, despite the US human population growing 67 percent since that time. Standard warned that future cattle kills will continue to be weak for the near future.

Peng Li, NRA regional director for Asia, reiterated that Asian markets have been a challenge due to HPAI with some markets shut down to rendered poultry products while others

remained open. However, the reaction hasn't been as dramatic as expected. Li showed that China's feed production was down in 2013 due to a reduced swine industry and overproduction and low prices for fish, but that Indonesia's feed industry is growing fast and is now the most important overseas market for US animal proteins.

German Davalos, NRA regional director for Latin America, updated the committee on Mexico's regulation establishing sanitary specifications for the processing of animal by-products and their use in animal feed that is still being finalized. Industry is waiting for additional comments but it appears at this time the regulation will align with US rules. Davalos highlighted the unusually large amounts of "fertilizer" imports into Ecuador, Columbia, and Chile from the EU, mostly from one trader in Italy. In 2014, Ecuador imported over 13,000 metric tons of the product, Columbia took 8,800 metric tons, and Chile brought in 2,500 metric tons, all seemingly high considering the size of the countries, Davalos noted.

Bruce Ross, Ross Gordon Consultants, said that processed animal protein use in EU fish feed has tripled in the past year to 75,000 metric tons but retailers are still cautious about buying fish fed animal protein meals. Allowing poultry proteins in porcine feed could be formally proposed this summer now that there is an approved method of detecting the presence of non-approved processed animal proteins in feed. The EU needs more feed ingredients hence the move to relax the animal protein ban that has been in place since 2001 in an effort to control BSE. Ross reported that 22 of the 28 EU member countries are now categorized as negligible risk for BSE.

The NRA Board of Directors meeting wrapped up the week and began with recognizing the recent passing of three influential members of the rendering industry: Dr. Don Franco, Dennis Griffin, and Mark McMahon (see People, Places on page 38). The board then announced the establishment of the Don Franco Distinguished Service Award for meritorious service to the rendering industry and will examine a new class of membership for used cooking oil transporters on the recommendation of several members. **R**

## Research Group Remains Focused

The Fats and Proteins Research Foundation (FPRF) met in Chicago, Illinois, to address business matters, beginning with the group's Research Committee where progress reports from all ongoing research and final reports from three recently completed projects were given. Dr. Dale Woerner, Colorado State University, briefed committee members on his current work on thermal validation of the rendering process, receiving input on how to best proceed. Dr. Brian Kerr, United States Department of Agriculture's Agriculture Research Service, presented data from his National Pork Board-funded project evaluating a large number of feed ingredients, including distiller grains and rendered products, for energy content and other characteristics. Kerr is also working on the vexing problem of measuring and evaluating oxidation of feed ingredients. Dr. Greg Aldrich discussed pet food research being conducted at the three-year-old pet food program at Kansas State University largely funded to date by FPRF.

The committee considered one pre-proposal and two

research proposals for possible future funding. Two research projects relating to rendered ingredients used in pet food were evaluated and advice was given for improving the design of the experiments. These may be funded in the future if a cooperating partner from the pet food industry comes forward to assist renderers in this venture. No new projects were recommended for funding at this time.

FPRF Chairman Erika Weltzien, Rothsay, informed the board of directors that some Animal Co-Products Research and Education Center projects carried out at Clemson University are now reaching commercialization, creating real value for the rendering community. The foundation continues to seek donations to ensure the best research possible for the industry. In 2014, FPRF received \$752,000, up from \$711,000 the year before. By the end of April 2015, contributions to the group stood at \$409,000. In the four years from 2006 to 2010, FPRF doled out nearly \$2 million on research projects; since 2011, the group has committed \$1.8 million to research. **R**

# Animal Disease Affects Canadian Renderers

Canadian renderers met in Chicago, Illinois, in April in conjunction with the National Renderers Association (NRA) spring meeting to address difficulties with export markets and pending regulations in the United States (US) that could prevent yellow grease from being shipped south of the Canadian border.

Rob Jones, West Coast Reduction Ltd., began the discussion with the ban of meat and bone meal to Indonesia after Canada's most recent bovine spongiform encephalopathy (BSE) case was discovered in February 2015. He shared that between 9,000 and 10,000 metric tons of meat and bone meal is produced monthly, mostly in western Canada, with 5,000 to 6,000 metric tons used domestically and the rest primarily exported to Indonesia. Since the market closure, some product has been going to the Philippines but a misunderstanding at the Canadian Food Inspection Agency (CFIA) briefly closed this market too, showing the vulnerability of Canadian meat and bone meal exports. Jones thinks the Indonesian market will not reopen until fall at the earliest, creating a need to find alternative buyers.

Another animal disease Canada is dealing with is avian influenza, although not to the extent it has affected the



United States. Al Rickard, Darling International Inc., noted that a case in southern Ontario was at a highly secure turkey farm. As of late April, the strain found on two farms was the highly pathogenic H5N2 virus discovered in British Columbia in late 2014 and in Washington in the United States shortly thereafter. All birds from the infected farms have been destroyed. According to CFIA, avian

influenza does not pose a risk to food safety when poultry and poultry products are properly handled and cooked. Avian influenza rarely affects humans who do not have consistent contact with infected birds.

A main focus for Canadian renderers is a proposed rule by the US Department of Agriculture's (USDA's) Animal and Plant Health Inspection Service (APHIS) amending current BSE regulations that now prohibit Canadian renderers from exporting yellow grease to the United States due to the possibility of it containing ovine or caprine material. A testing and certification program to verify that this material is not in yellow grease has been developed by the Canadian rendering industry and presented to USDA by CFIA with a request to allow exports under this certification program under the rule is final. NRA staff will also discuss this issue with APHIS. **R**

WALINGA®

RENDERING UNITS





FRONT FORKLOAD UNIT

**FEATURES**

- All Aluminium
- 100% welded construction
- Aerodynamic front
- Recessed hoist
- Full open top
- Water tight sealed tailgate
- Hydraulic controls

**OPTIONS**

- Air operated tailgate lock
- Salad buckets
- Body load divider
- Sealed work lights
- Solid roof
- Remote controls
- Roll tarp roof



END DUMP UNIT



SEMI TRAILER UNIT



**ENGINEERED TRANSPORTATION EQUIPMENT**

Walinga USA  
Wayland, MI  
(800) 466-1197

Email: [tjm@walinga.com](mailto:tjm@walinga.com)  
Website: [www.walinga.com](http://www.walinga.com)

[www.walinga.com](http://www.walinga.com)



#### Haarslev Business Areas

- Protein
- Environment
- After-Sales and Service

## Haarslev Industries Replacement Rotors

Haarslev Industries is the world's largest manufacturer of equipment for the rendering industry.

Our replacement rotors are built to the highest standard and the performance will in many cases exceed the original factory specifications.



#### Haarslev Inc.

9700 NW Conant Avenue, Kansas City, MO 64153  
Tel. (816) 799-0808 • Fax (816) 799-0812  
E-mail: [info-usa@haarslev.com](mailto:info-usa@haarslev.com) • Web: [www.haarslev.com](http://www.haarslev.com)

Greensboro, NC • Belleville, KS  
Perham, MN • Shellman, GA





# APPI Membership: Continuous Improvement

The Animal Protein Producers Industry (APPI) oversees the rendering industry biosecurity programs in North America. APPI programs feature ways to control biological, chemical, and physical hazards and to comply with changing feed regulations. APPI is a committee within the National Renderers Association, but is open to all renderers.

APPI's mission is to assist member companies in manufacturing safe products. The *North American Rendering Industry Code of Practice* corresponds very closely to the initiatives taking place throughout the entire food chain and furthers the concept of safe feed – healthy livestock – safe food – healthy people. With continued intense scrutiny on all feed ingredients, the development of the *Code of Practice* by renderers shows great foresight. The leading edge of the rendering industry is renderers who participate in this *Code of Practice*, and participants can be found at <http://nationalrenderers.org/biosecurity-appi>. This certification

includes independent third-party audits and aligns with the new Safe Feed/Safe Food program from the American Feed Industry Association. Certifying with the latest version of the *Code of Practice* will:

- ensure compliance with new feed regulations required by federal law;
- assure customers that a renderer is a verified safe supplier;
- offer a single audit for recognition by two well-known programs;
- help employees take pride in their work; and
- identify opportunities for continuous improvement.

APPI will continue to develop innovative programs to promote the safety of animal proteins and fats through testing, continuing education and training, and collaborative research. When new regulations are issued, APPI programs will make any needed adjustments to keep participants up-to-date. **R**

**The following 187 plants in the United States and Canada made a significant commitment in 2014 and will be the foundation for safe rendered feed products in the future.**

AB Foods LLC	Iowa Protein Solutions	Sacramento Rendering
Alberta Processing Co. (Canada)	Island Commodities	Sanimax (4 plants, 2 of which are in Canada)
American Proteins Inc. (4 plants)	JBS Foods (previously XL Foods) (Canada)	Saskatoon Processing Co.
Ampro Products Inc. (6 plants)	JBS Souderton Inc. (3 plants)	S.F. Rendering Ltd.
Baker Commodities Inc. (7 plants)	JBS Swift & Company (8 plants)	Simmons Feed Ingredients
BHT Resources	John Kuhni Sons Inc.	Smithfield Foods Inc. (previously Farmland) (4 plants)
Boyer Valley Co.	Kaluzny Bros. Inc.	Smithfield Foods Inc. (previously John Morrell & Co.) (2 plants)
Cargill Meat Solutions (8 plants)	Keystone Protein Company	Smithfield Foods Inc. (previously Smithfield Packing) (2 plants)
Clemens Food Group	Kruger Commodities	Standard Fertilizer
Clougherty Packing	Maple Lodge Farms (Canada)	Tallowmasters LLC
Coastal Protein*	Mason City By-Products	Tri Star*
DaPro LLC	Mid-South Milling Co. Inc. (2 plants)	Tyson Foods (blending)
Darling Ingredients Inc. (28 plants)	Mountain View Rendering	Tyson Foods (River Valley Animal Foods) (8 plants)
Darling Ingredients Inc. (previously Griffin Industries) (10 plants)	Mountaire Farms of Delaware Inc.	Tyson Fresh Meats (13 plants)
Encore Oils	National Beef LLC (3 plants)	Valley Proteins Inc. (14 plants)
Farmers Union Industries LLC (Central Bi-Products) (2 plants)	Northern Alberta Processing (Canada)	West Coast Rendering
Fieldale Farms Corp. (2 plants)	Nutra-Flo Co.	West Coast Reduction Ltd. (Canada)
Foster Farms (2 plants)	Nutri Feeds Inc.	Western Mass. Rendering
G.A. Wintzer & Son Co.	Nutrimax Inc.	Wilbur Ellis Company (2 plants)
Hahn & Phillips Grease	Oklahoma By-Products	
Harris Ranch Beef Co.	Pilgrim's Pride Corp. (5 plants)	
Hormel Food Corp. (2 plants)	Protein Products	
Indiana Packers Corp.	Rothsay (5 plants in Canada)	

\*New participant in 2014



## Rendered Products Are Safe.

**As an essential link in the food chain**, the rendering industry is conscious of its role in the prevention and control of bacteria and virus, to provide safe feed ingredients for livestock, poultry, aquaculture, and pets. Every effort is made to ensure that cooking destroys microbes, and that recontamination does not occur after the rendering process.

Since 1985, the Animal Protein Producers Industry (APPI) has coordinated a program of education and laboratory testing for renderers to control *Salmonella*. Now, APPI offers a sophisticated training and process testing to offer the most appropriate controls and practices to best assure safe products. Our advanced feed safety programs include strategies to control biological, chemical, and physical hazards that can occur in animal production and processing systems. A concerted effort is made to foresee any hazard likely to occur and to build prevention of risk into manufacturing. Process controls in rendering verify that cooking temperatures control microbial and viral contamination. These programs also concentrate on recontamination prevention with rodent control, plant and transport sanitation, and other biosecurity measures.



More than 90% of rendered product in the U.S. and Canada are produced under principles in the Rendering Code of Practice or equivalent programs such as HACCP. If you are a customer—ask for these credentials and rest assured. If you are a renderer, make sure you take advantage of these excellent programs.

---

For information, contact Dara John at 660-277-3469 or [appi@cvalley.net](mailto:appi@cvalley.net), or visit us on the web at <http://www.nationalrenderers.org/biosecurity-appi/>.

## Looking Ahead with a New Strategic Plan

The National Renderers Association (NRA) is about to embark on change in order to be ready to meet the future needs of renderers and their customers over the next five years.

In April, the NRA Board of Directors approved a new 2020 Strategic Plan that charts the association's path forward to meet the challenges of future markets and the needs of the North American rendering industry. For renderers, supplies of raw inputs are as critical and volatile as demand for their finished products, sometimes even more so. Both upstream and downstream customers and allied suppliers are vital. They are the industry's partners.

NRA's 2020 Strategic Plan identifies a "desired state" that says "our global community (will) trust the unique social, environmental, and economic value that NRA members deliver." NRA's new vision is "to deliver sustainable rendering solutions to our global community," while its updated mission is to "advocate for a sustainable food chain, public health, and the environment through the production and marketing of rendered products and services."

The board of directors approved the following priorities to accomplish this new mission. NRA will:

- promote effective public policy, regulation, and technology;
- encourage responsible business practices;
- support free movement of rendered products in domestic and international markets; and
- improve stakeholder awareness and understanding of the value of rendering.

Sustainability is a recurrent theme throughout NRA's new strategic plan. Consider that in this protein-hungry world, the global population is expected to increase over 30 percent to 9.6 billion people by 2050. The overall outlook is strong for high-quality and safe feed ingredients to help produce meat, poultry, and fish. Over the next 40 years, the World Wildlife Fund projects the Earth will need to generate as much food as has been produced in the past 8,000 years of agriculture.

Competition will be stiff for resources to produce enough feed and food for this growing population, putting serious strain on world resources such as water and land. For this reason, rendering and its positive environmental footprint will play an increasingly important role in sustainable agricultural production. Each year, renderers collect almost 60 million pounds of raw materials in the United States and Canada, and recycle them into 10 billion pounds of fat and oil products, and nine billion pounds of protein meals.

Sustainability is also key for consumer goods and industrial customers who use rendered products to produce a multitude of items such as soaps, paints and varnishes,



Nancy Foster

cosmetics, explosives, personal care products, pharmaceuticals, plastics, inks, leather, textiles, and lubricants. Alternative sustainable sources of energy, such as biodiesel and renewable diesel, will be increasingly important in this changing world.

Sustainability can mean different things to different people. During NRA's recent outreach to customers and association members in its strategic planning process, it was recognized that sustainability is critical for rendering suppliers, customers, and their brands, and not just for today, but also in the future. Importantly, we as an industry need to define for them how rendering's

sustainability reduces their overall footprint. Sustainability must be economically viable while socially responsible and environmentally sustainable.

Rendering's contribution to sustainability is well-known within the industry but not nearly well enough beyond it. Rendering has a net positive carbon footprint since it reduces more emissions than it generates, considering other means of animal co-product disposal. For example, a single decomposing dairy cow releases 1.2 metric tons of carbon dioxide. Rendering avoids this.

Rendering animals in North America has the same effect on greenhouse gas emissions as removing 12.3 million cars from the road each year. If all North American renderable products were sent to landfills, all available space in the United States and Canada would be used in four years.

One of the challenges identified in NRA's new 2020 Strategic Plan is the need to further increase awareness of rendering's vital role to the public, customers, and policymakers at the local, state, and federal level. Greater understanding will help build more support for the ability of renderers to freely and responsibly operate, and contribute to their communities and customers.

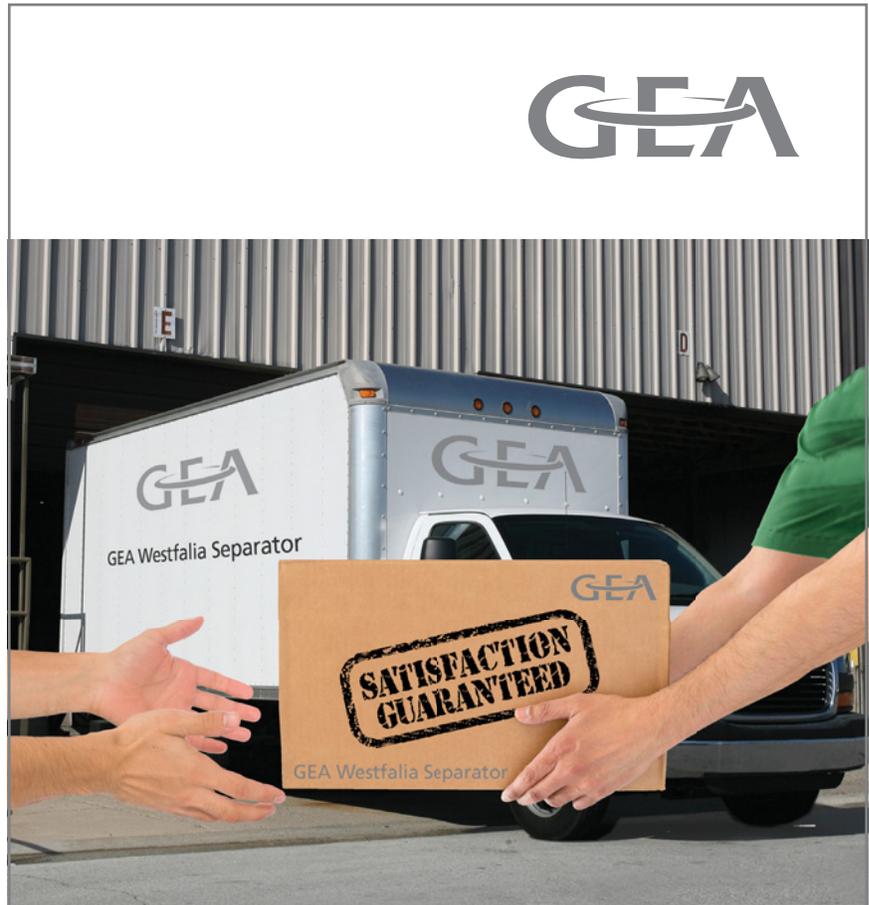
NRA's new 2020 Strategic Plan focuses on three core areas where the association's energy and resources will be devoted over the next five years.

1. People and community—Advocate understanding and awareness of the value rendering provides to global communities through communication, education, and outreach to deliver the following impacts:
  - a. Maintain and promote sustainable business operations in local and larger communities through shared values.
  - b. Enhance NRA's ongoing value proposition to current and new members, as well as stakeholders, and maintain strong capabilities to manage domestic and international crises.
  - c. Attract and retain new talent to the industry.

2. Domestic and international markets – Promote the demand and market access for rendered products to domestic and international customers. Secure adequate resources from key strategic partnerships (members, federal government, and strategic allies).
3. Image and value of rendered products and services
  - a. Product safety – Establish the Animal Protein Producers Industry *North American Rendering Industry Code of Practice* and its third-party certification program as the industry standard for facilities and customers.
  - b. Sustainability – Establish social, environmental, and economic metrics through a continuous improvement model.
  - c. Value – Advocate that rendering is the best value for co-product streams as defined by the food recovery hierarchy (people, animals, energy, fertilizer, compost, and, lastly, landfill).

In the coming months, NRA committees and staff will develop plans and programs to begin implementing the new 2020 Strategic Plan that resulted from diligent work by a Strategic Planning Task Force of individuals from diverse companies. They listened, debated, sometimes disagreed, and learned from each other and their customers in this process. We thank the following task force members for devoting their considerable time and talents to develop NRA's 2020 Strategic Plan:

Tim Guzek, Sanimax, chairman; Duane Anderson, Farmers Union Industries LLC; Andy Andreoli, Baker Commodities Inc.; Ridley Bestwick, West Coast Reduction Ltd.; Kim Broekemeier, Tyson Foods Inc.; Tim Carlson, Hormel Foods LLC; Michael Glenn, BHT ReSources; Ross Hamilton, Darling Ingredients Inc.; Michael Koewler, SRC Companies; Doyle Leefers, National Beef Packing LLC; J.J. Smith, Valley Proteins Inc.; and Gus Wintzer, G.A. Wintzer & Son Co. **R**



## Delivering More than Just Our Parts

Delivering satisfaction guaranteed. That's our promise when you order parts from us. Our genuine parts assure you of a perfect fit. And our Global Logistics Network and extensive North American inventory means parts are available for delivery to your facility overnight or, in some cases, the very same day. As an added value, our staff of dedicated parts professionals provides technical service support for every part we ship.

To learn more about our replacement parts, repair or service offerings, all guaranteed, email [sales.wsus@gea.com](mailto:sales.wsus@gea.com), call, or visit us online.

**GEA Group**  
 Centrifuges & Separation Equipment  
 Phone: 201-767-3900 · Toll-Free: 800-722-6622  
[www.gea.com](http://www.gea.com)

engineering for a better world

2003T

## Proposed RFS Volumes Imminent

Under pressure from a lawsuit filed by the American Fuel and Petrochemical Manufacturers (AFPM) and the American Petroleum Institute over long overdue rules implementing the federal Renewable Fuel Standard (RFS), the Environmental Protection Agency (EPA) agreed to release proposed volume obligations for 2014 and 2015 by June 1, 2015, and final rules by November 30 of this year. Although not related to the lawsuit, EPA said it is also committed to proposing and finalizing 2016 RFS volume requirements and 2017 RFS biomass-based diesel volume obligations on the same June/November schedule. In addition, the agency will re-propose volume requirements for 2014 by June 1 that reflect the volumes of renewable fuel that were actually used in 2014. According to the National Biodiesel Board (NBB), approximately 1.75 billion gallons of biomass-based diesel, or biodiesel, was produced in 2014.

“We hope this outcome will enable EPA to issue future RFS implementation rules in accordance with the congressionally-mandated deadlines that were designed to provide refiners with some regulatory certainty and the ability to adjust their compliance strategies throughout the compliance period,” said AFPM general counsel Rich Moskowitz.

“We are pleased to see the EPA make these further commitments toward ending these delays,” said Anne Steckel, vice president of NBB federal affairs. “Biodiesel is the most successful EPA-designated advanced biofuel under the RFS to date, and the [President Barack] Obama administration should be doing everything it can to promote biodiesel so we can show that advanced biofuels are here today, cutting greenhouse gas emissions by more than 50 percent, creating jobs, and reducing our dependence on global petroleum markets that wreak havoc on our economy.” The National Renderers Association is coordinating with NBB to urge EPA to move forward as soon as possible on the RFS for 2014, 2015, and 2016.

According to an analysis by the Biotechnology Industry Organization (BIO), EPA’s delay in RFS rulemaking over the past two years has caused an estimated \$13.7 billion shortfall in investment in advanced and cellulosic biofuels just as the industry reached commercialization. BIO also estimates that the delays have undercut the industry’s ability to create jobs by more than 80,000 directly in operations and construction, and an additional 228,000 indirectly within the rural economy. BIO has tracked the advanced biofuel industry’s development and construction since 2009.

---

## Europe Moves toward Advanced Biofuels

After much debate and discussion, the European Parliament has voted to cap crop-derived biofuel production and accelerate the shift to alternative sources.

Current legislation requires European Union (EU) member states to ensure that renewable energy accounts for at least

10 percent of energy consumption in transport by 2020. The new law requires first-generation biofuels from crops grown on farmland to be no more than seven percent of that consumption in an effort to cut greenhouse gas (GHG) emissions caused by the increased use of agricultural land for biofuel crops.

Also under the new law approved April 28, 2015, fuel suppliers must report to EU countries and the EU Commission the estimated level of GHG emissions caused by indirect land-use change (ILUC) (i.e., freeing up more land to grow food crops) in order to offset that switch to biofuel production. The Commission must then publish data on ILUC-related emissions and report back to the European Parliament and the Council of Ministers on the scope for including ILUC emission figures in the existing sustainability criteria.

EU member states are required to set a national target, no later than 18 months after the EU directive enters into effect, for the share of advanced biofuels (e.g., those sourced from certain types of waste and residues and new sources such as seaweed) in total transport consumption. Member states must enact the legislation by 2017.

---

## Guilty Pleas in RIN Fraud Cases

Four individuals have pleaded guilty for their roles in a multi-state scheme of fraudulently selling biodiesel incentives known as renewable identification numbers (RINs) under the federal Renewable Fuel Standard (RFS).

Joseph Furando, of Montvale, New Jersey, together with companies he operated in that state – Caravan Trading Company and CIMA Green – pleaded guilty in mid-April to conspiracy, wire fraud, lying to investigators during a search of his offices, and engaging in prohibited financial transactions (money laundering). Three Indiana-based individuals and their company, E-biofuels, pleaded guilty in late April for their roles in the same scheme. Brothers Chad Ducey, Chris Ducey, and Craig Ducey sold over 35 million gallons of biodiesel falsely claiming the fuel was eligible for RINs when they knew it was not. The brothers pleaded guilty to conspiracy, false claims against the International Revenue Service (IRS), wire fraud, and lying to the Environmental Protection Agency and IRS. Craig Ducey also pleaded guilty to a related \$58.9 million securities fraud that victimized over 625 investors and shareholders of Imperial Petroleum, a publicly-traded company and the parent company of E-biofuels.

From 2007 through 2012, E-biofuels owned a biodiesel plant in Middletown, Indiana. Furando admitted that sometime in late 2009, he and his companies began supplying E-biofuels with biodiesel that was actually made by another company and had already been used to claim tax credits and RINs. Because these incentives had already been claimed, Furando could purchase the biodiesel at low prices, sometimes for more than \$2 per gallon less than biodiesel that was eligible for the credits. He then supplied the product to E-biofuels that he

and his codefendants claimed to have produced. They then illegally recertified it and sold it at the much higher market price for incentivized biodiesel, known as “B100 with RINs.” Furando referred to this program of fraud as “Alchemy.” Over the course of about two years, the defendants fraudulently sold more than 35 million gallons of fuel for a total cost of over \$145.5 million and realizing a profit of more than \$55 million at the expense of their customers and taxpayers.

All defendants face up to 20 years imprisonment on some of the charges, as well as large fines and payment of restitution to the victims, which include truck stop companies, fuel traders, and others. The co-conspirators will also forfeit \$7.5 million in seized funds, jewelry, artwork, vehicles, and homes purchased with the money obtained through the scheme. Multiple federal agencies collaborated on the cases.

## Iowa Policies Spur Growth

Iowa Department of Revenue data shows significant growth in biodiesel use in the state in 2014, despite the expiration of a federal biodiesel tax credit and the Renewable Fuel Standard (RFS) being left in limbo. Iowa’s state-level biodiesel policies are being credited for the surge, including a tax credit to retailers selling five percent and higher biodiesel blends. On July 1, 2015, 11 percent and higher biodiesel blends will see a three-cent-per-gallon reduction in state fuel taxes.

The department’s 2014 Retailers Motor Fuel Gallons Annual Report showed that biodiesel sales increased by more than 15 percent over 2013 to an all-time-high of 33.3 million

gallons. Biodiesel now accounts for 4.6 percent of Iowa’s total diesel fuel supply, up slightly from 2013, and is blended into almost half of all diesel sold with an average blend level that climbed to 9.4 percent. The increased average blend level is largely due to a sizeable shift among retailers from 10 percent biodiesel in 2013 to 20 percent biodiesel last year.

Iowa manufacturers produced 227 million gallons of biodiesel in 2014, roughly 16 percent of annual biodiesel production in the United States. The state is the nation’s leader in renewable fuels production with 12 biodiesel facilities having an annual capacity of nearly 315 million gallons.

## REG Suffers Fire

In early April, a fire at Renewable Energy Group’s (REG’s) Geismar, Louisiana, biorefinery injured two employees and caused damage to an area of the production facility. The cause of the fire is still under investigation, but is not believed to be from the renewable hydrocarbon diesel production process, according to Dan Oh, REG president and chief executive officer. The employees are still recovering from their injuries, which were not life-threatening.

REG expects the investigation and fire damage repair to take about three months, during which time an upgrade scheduled for later this summer to bring pre-treatment, storage, and enhanced logistics capabilities to the facility will also take place.

*Continued on page 22*

**The RENDERER**

**FAT and BONE**

**Summit Trailer Sales, Inc.**  
 One Summit Plaza  
 Summit Station, PA 17979  
**(570) 754-3511**  
 www.summittrailer.com • info@summittrailer.com

## SeSequential Ramps Up Production

SeSequential Pacific Biodiesel has upgraded equipment and added operators at its plant in Eugene, Oregon, in anticipation of growing demand for biodiesel after Governor Kate Brown signed Senate Bill 324, which fully implements the Oregon Clean Fuels Program. The bill lifts a 2015 sunset on the state's low carbon fuel standard and supports Oregon's target of lowering transportation-related greenhouse gas emissions by 10 percent by 2025.

With the ramped up operations, SeSequential expects to increase production by nearly 20 percent this year. The company has also installed a blending rack to allow customers using biodiesel blends to mix their product onsite. Founded in 2005, SeSequential makes its biodiesel from used cooking oil collected from thousands of restaurants, businesses, hospitals, and schools throughout the region. In late 2014, the company expanded its oil collection operations into Northern California, adding the San Francisco Bay Area to its service territories anchored in Portland and Salem, Oregon, and Seattle and Spokane, Washington.

## Viridis Fuels Receives Grant

Viridis Fuels LLC has received a \$3.4 million state grant from the California Energy Commission for its biodiesel project situated in the Port of Oakland – the fifth busiest shipping container port in the United States – at the foot of the San Francisco-Oakland Bay Bridge in California. The company has a long-term land lease agreement for its project site that has been approved by the California Natural Resources Agency under the California Environmental Quality Act. The city of Oakland has provided only one franchisee — Oakland Maritime Support Services — approval for the next 35 years to sell fuel to the 10,000 diesel trucks entering the port daily. Viridis Fuels has signed an agreement to sell up to five million gallons of its biodiesel for distribution in the port at a 20 percent blend.

Viridis Fuels has chosen SRS Engineering to provide a turnkey operation that will utilize low-quality, low-cost feedstock for producing up to 20 million gallons of biodiesel and four million gallons of technical-grade glycerin annually. The process will include degumming, bleaching, cold soak filtration, transesterification and esterification, patented resin purification, and removal of sulfur and heavy metals.

The Viridis Fuels Board of Directors includes chairman Elihu M. Harris Jr., an attorney, business owner, and former Oakland mayor; vice chair Dan Boggan, a current board member of Clorox and Collective Brands Inc., former vice chancellor of University of California, Berkeley, and former National Collegiate Athletic Association senior vice president and chief operating officer; and chief financial advisor Arnold Grisham, the president and chief executive officer (CEO) of Tri Valley Bank and former member of the San Francisco Federal Reserve Bank Board.

Kathy Neal, a former California environmental regulator and Port of Oakland commissioner with 30-plus years of business experience, is CEO. **R**

when it touches certain parts of their lives. While medicines produced through biotechnology may be ingested or injected daily across the continent, woe unto the vendor who tries to sell a bag of genetically modified (GM) corn chips or a low-acrylamide GM potato. Further, the EU has a long history of approaching technology with a better-safe-than-sorry attitude, demonstrating to US observers an apparent willingness to forego benefits (i.e., price and availability) to stay true to the precautionary school of risk prevention. The classic example is the EU ban on the use of growth hormones in US cattle. The WTO ruled twice in response to US filings that the EU ban is illegal and the beef from such animals is safe and should be fairly traded. The EU simply chooses not to go along. The following sums up the philosophical opposition.

Atlantic-Community.org said this in a guest column in October 2014: "To conclude an ambitious agreement, TTIP has to reconcile free trade with democratically legitimated regulation. Scrapping or harmonising [*sic*] social regulation has minimal economic benefit but high potential risk. Negotiators need to agree on when governments can legitimately respond to citizens' concerns, even if their action is not scientifically validated and limits TTIP's potential economic benefit." Said one columnist in the online newspaper *EUobserver* in January 2015: "TTIP was always likely to be vulnerable to latent anti-Americanism in many EU countries. There were scare stories about the prospect of US chlorine-treated chicken and hormone-treated beef flooding European supermarkets."

While its fate is also tied by trade observers to successful TPA authorization to Obama, there has been little public talk in Congress about TTIP. While several in Congress contend the talks aren't far enough along to judge their success or identify points of disagreement, the most recent development is the creation in April of a bipartisan TTIP caucus in the House. For itself, the White House points to the mere existence of negotiations as a major policy coup.

However, reality often wins out in such discussions. Just as a few years ago, a shortage of animal feed in the EU led to a temporary lifting of the EU ban on the use of GM feed grains, the recent approval by the EU of 10 new GM crops for import, but not cultivation – the first approvals since 2013 – and a 10-year extension of the official blessing of seven other GM varieties used in the EU, showing at least tiny cracks in the anti-GM facade. There are now 58 GM crops authorized by the EU, with 40 applications pending, according to EuropaBio, the biotech trade group.

Yet a separate shift in the EU GM policy allows individual EU member nations to restrict or prohibit GM imports, even if already approved by the full EU. The United States says this action is a trade barrier and a "hindrance" to ongoing TTIP negotiations. EU anti-GM voices can be heard accusing EU leaders of breaking their policy promise to ban GM ingredients in food in order to get the potentially lucrative US-EU trade deal.

### "Normal" Trade with Cuba?

President Obama's announcement last December that he was moving to normalize diplomatic relations with Cuba for the first time since Fidel Castro overthrew the Battista government

in 1958 would only allow him to nibble around the edges of the formal US trade embargo with the Caribbean nation.

The current trade embargo is a commercial, economic, and financial restriction imposed in 1960 by Congress, covering not only US sales to Cuba, but the import to the United States of just about anything manufactured in Cuba. The embargo is enforced mainly through six federal statutes, some specific to Cuba, some not. In 1999, President Bill Clinton expanded the trade embargo by forbidding foreign subsidiaries of US companies to trade with Cuba.

Establishing an embassy in Havana may be a cakewalk – if a GOP-controlled Senate confirms an ambassador – but action to lift the trade embargo will be a long, emotional process and a very heavy political lift. Announced GOP presidential candidate hopefuls Senators Marco Rubio (R-FL), whose parents emigrated from Cuba before the revolution, and Ted Cruz (R-TX), the son of a Cuban exile, are in agreement opposing the Obama Cuba plan and lifting the embargo. Both White House contenders say they'll block confirmation of a US ambassador to Cuba. Senator Robert Menendez (D-NJ) has also vowed to block any congressional action to lift the US embargo.

In the House, Representative Mario Diaz-Balart (R-FL), chairman of a House Appropriations Committee subcommittee, tucked into his subcommittee's Department of Transportation fiscal year 2016 spending bill language to block regularly scheduled commercial airline flights from the United States to Cuba and prevent cruise ships from docking there. Other House opponents of the president's Cuba policy are expected to try to attach policy riders on spending bills moving through the financial services and state-foreign operations appropriations subcommittees.

While agriculture and medical products have been allowed since the early 1990s, Obama also eased trade restrictions on building materials, telecommunications, and other technological goods to Cuba. Agriculture used to be restricted to direct-to-farm sales – no government purchases – and only with a specific license and on a cash-in-advance basis. Under Obama, those licenses are no longer required and the cash payment is due only when goods arrive at a Cuban port.

The driving force within agriculture to normalize trade with Cuba is the US Agricultural Coalition for Cuba, a 40-member group of national associations and companies committed to full, unfettered trade with the island nation. "We believe that the improvement of agricultural trade between the US and Cuba is the foundation for building successful and enduring relations between both countries. We strive to turn Cuba from an enemy to an ally within our lifetime," says its mission statement in part. That "within our lifetime" phrase is evidence of how long removing all legal impediments to US-Cuba trade may take.

Even with administrative tweaks, financing trade deals remains nearly impossible, complicated by forbidden bank-to-bank transactions and an inability for Cuban buyers to get credit. In April, Obama said he'll remove Cuba from the State Sponsors of Terrorism list, which severely restricts US banks.

Congress is starting to slowly act to ease credit and trade financing. Senators Heidi Heitkamp (D-ND) and John Boozman (R-AR) introduced legislation to lift credit restrictions on trade with Cuba, but the biggest obstacle from a process standpoint is that private companies and banks cannot currently provide credit for shipments destined for Cuba. Senator Jerry Moran (R-KS) introduced legislation to remove credit restrictions and

*Continued on page 27*



## RENDERING TRAILERS

● 23 YEARS ● 12,000 TRAILERS

PROVEN TRAILERS, BUILT TO YOUR SPECIFICATIONS



**WAVE\* FRAME-TYPE  
RENDERING TRAILER**

- 850 gallon internal blood tank
- External hoist (no doghouse)
- Aerodynamic dual-wall sides
- All aluminum frame



**WAVE\* TOTE DUMP**

- Proven Organic Waste and Fat/Bone hauler
- All aluminum construction
- Long reach aluminum bucket
- Quad Axle trailer as shown 14,750 lbs



**CLASSIC\* FRAME-TYPE  
RENDERING TRAILER**

- Steel frame
- Optional air-operated center gate
- Dumping or non-dumping style available
- Internal or external 850 gallon blood tank available

CUSTOMIZED OPTIONS



Half lid



Ball valve drains, in gate or underbody



Air-operated center gate



Blood tank and center gate

**RENDERING EXPERIENCE  
CALL US FOR REFERENCES**



**PROUD  
MEMBER**

**WWW.TRAVISTRAILERS.COM**  
800-535-4372  
info@travistrailers.com

## Educating for Positive Change with “e-learning”

In this column in the April issue of *Render*, Tim Juzefowicz explained how the Australian concept of education using the classroom workshop approach works for the rendering industry in Australia and New Zealand. In this second of three articles, the “e-learning” or online approach is examined, weighing the pros and cons of using this method in the United Kingdom (UK) and further abroad.

In 2013, an e-learning program containing rendering industry modules was developed by Beacon Synergy in conjunction with the Foodchain and Biomass Renewable Association (Fabra), a UK rendering industry group. The online system was trialed by Fabra members and launched commercially as [www.fabraeducation.co.uk](http://www.fabraeducation.co.uk).

One of the key objectives of the e-learning concept was to simplify complex messages and deliver them in interesting, engaging, and memorable ways to the widest possible audience. The learning materials were designed and produced by industry experts, including this author, and converted into bite-size modules that could be viewed by learners in short periods of time, such as 10 minutes each. The message was delivered in English, but was suitable for translation complete with voiceover in another language. The aim was to provide training on-the-job rather than require employees to leave their place of work for training.

The subject matter was very extensive so areas of interest were distilled into separate parts termed “modules” (figure 1). Some of the modules developed so far, together with ideas for future modules, are:

- sorting meat and poultry by-products at the slaughterhouse;
- transporting of animal by-products according to European Union regulations;
- biosecurity for collection of fallen stock, from farm to processing;
- hazard analysis and critical control point (hygienic rendering) at the rendering plant; and
- production of feed-grade animal proteins for animal feeds.

Each module focused on a specific area of activity that the learner could relate to and were designed to be followed by a series of multiple choice questions that allowed an evaluation of the learning experience. Successful candidates were awarded a certificate acknowledging they had completed the module to a satisfactory standard. The development of the modules was funded by Fabra, but the individual cost for each module per learner was paid for by the employer.

The positive aspect of e-learning was that all who took part felt they had learned something new in an effective way while trying to understand complex subjects such as compliance with regulations. The successful candidates who were awarded certificates truly seemed to benefit from the training.

At the outset of the project, it was deemed important that regulators gave their approval and support to the idea

**Figure 1: Illustration of a module leading to a level 2 award**



of education or went further and made completion of the program a mandatory requirement for individuals to meet the needs of animal by-product regulations. It was pleasing that the former – support for the concept of better education within the industry – was given, but the latter – to be a mandatory requirement for approved operators – appeared to not be supported by the UK government.

In light of difficulties with making the education courses mandatory, another approach considered was to make the program part of an integrated education certificate or award. This idea was given serious thought, but challenges arose due to a requirement that Fabra be approved by the government as a certified education provider. This additional bureaucracy and cost resulted in a need for additional investment that in turn increased the unit price for each learner. One solution was to have a higher number of learners, but as the UK rendering industry is relatively small, there were not enough potential learners to spread the costs. This problem was further compounded by the fact that rendering did not easily fit into any of the existing educational programs available, which were essentially based on either food or meat. Fitting into one of these schemes would have effectively spread the overhead expenses and reduced costs to a more affordable level. Thus, the lack of a wider infrastructure to support the rendering industry made it more difficult to meet the financial demands of taking this e-learning approach. One of the other key drawbacks was that senior management appeared to place only a limited value on continuing education of their staff and was reluctant to commit funds to pay the modest fees for individuals to complete the online training after the introductory period.

In summary, a simple approach that met the requirements of the industry to elevate its educational standards appears to have failed. Why? The reasons given for the UK and worldwide rendering industry not embracing e-learning in practice have been difficult to determine. This is even more puzzling since

there was and still is a general commitment to more and better training for the industry.

One way of showing the opinions received from the industry following the launch of the online education program is to summarize the pros and cons as follows.

The pros:

- Training could be chosen with regard to topic and degree of complexity.
- Available online so no need to leave workplace for training.
- Relative cost per learner is very low compared to classroom.
- Outreach to distance, e.g., worldwide, is feasible.
- Alternative languages/speech can be applied to the programs.

The cons:

- Industry incentive to learn was not as high as expected.
- Not mandated by government department responsible for overseeing the rendering industry.
- Lack of endorsement from independent certification body.
- Traditionalists still favored the classroom approach, if any education at all.
- Not all potential users have online access to online facilities.

Nonetheless, although the UK based e-learning concept could be described as only a partial success, the fact that some modules are already prepared makes it easy to imagine that

e-learning for the rendering industry could be revived if such a demand arose.

### What about the future?

The prospect for using e-learning in the UK revolves around several key areas. Is there a demand for any type of training in the industry? If there is, are programs available? And finally, what is the most appropriate method available?

If the first answer is not a convincing yes, then the following questions are rather academic. Outside of the UK, the idea of e-learning has also been discussed over the last two years or so, but there appears to be similar reservations about this idea when attempting to make it work for the rendering industry. The concept of a truly international education system is very appealing, but it is clear that there are significant cultural, regulatory, and financial obstacles to overcome before such a platform might be viable.

So in conclusion, it is clear that the concept of e-learning is alive and well, but the only way the idea will work is if there is greater demand and commitment from the industry that would bring sufficient funding to develop and operate a range of certified educational modules. Hopefully this article and the contrast with the conventional classroom approach that was examined in the last issue of *Render* may shine some light on the idea of improving education for the industry. In this series' third and final article in the August *Render*, some conclusions will be drawn from the two different approaches that will assist the World Renderers Organization to recommend the best approach to educate the global rendering industry. **R**

## The Gold Standard in Antioxidants from Novus

Novus's SANTOQUIN® sets the standard for antioxidants with more than 50 years of successful use in the rendering industry. Now you can also choose either SANTOQUIN® Q4T or SANTOQUIN® Plus for your antioxidant needs.

### SANTOQUIN-Q4T

- Application in vegetable oils, yellow grease and animal vegetable blends to maximize your protection in vegetable matrices

### SANTOQUIN® PLUS

- Application in rendered/blended product to maximize FDA approved levels of Ethoxyquin and BHT in fats and oils

### Your Ally in Rendering

Novus stands with the rendering industry in defending the safe, proper, and effective use of antioxidants



For more information on Novus and our Antioxidant portfolio, please contact your Novus sales representative or e-mail [contact.usa@novusint.com](mailto:contact.usa@novusint.com)

© NOVUS and SANTOQUIN are trademarks of Novus International, Inc., and are registered in the United States and other countries.  
© 2015 Novus International, Inc. All rights reserved.  
329

**NOVUS**

## Research Shows Unique Uses for Rendered Products

The Clemson University Animal Co-Products Research and Education Center (ACREC) spring meeting held in late March was launched with a scientific poster session held at Clemson's International Center for Automotive Research (CU-ICAR) in Greenville, South Carolina. Members of the Fats and Proteins Research Foundation had the opportunity to interact with researchers to ask questions and better understand the projects.

Afterward, Dr. Srikanth Pilla, assistant professor of automotive engineering, gave the group a tour of the CU-ICAR facility, highlighting the university's Deep Orange program that includes a cutting-edge concept car being designed and constructed by students. This year's Deep Orange 5 project was sponsored by General Motors and was recently unveiled at the automaker's Renaissance Center in Detroit, Michigan. Pilla's ACREC study to generate fiber-reinforced thermoset composites using processed animal proteins is currently underway and has potential to be used in future concept cars.

At the ACREC Research Committee meeting held on the Clemson University campus, researchers submitted five final reports, seven progress reports, and 10 new pre-proposals. Final reports were accepted for the following studies: pathogenic *Salmonella* thermal death time (Dr. Annel K. Greene, Dr. M. Melissa Hayes, and Yubo Zhang), water activity (Greene, Hayes, Zhang, and Dr. Xiuping Jiang), biodegradable and renderable glove (Dr. Andrew Hurley), chemical analysis of feather meal (Dr. Joseph Thrasher), and the second stage of malodor destruction (Drs. Frank Alexis and Daniel Whitehead).

Pilla discussed his progress on "Interactive and Integrative Engineering of Rendered Proteinaceous Materials Based Thermoset Biocomposites for High-Strength, Superior-Performance Applications." In this study, Pilla is using the inherent chemical functionality of processed animal proteins to create composites for use in the automotive industry. Due to new fuel efficiency standards, automotive manufacturers will need to reduce the weight of automobiles. One of the most drastic ways to do this is through the use of composite materials. Pilla's work has resulted in composites made with processed animal proteins and he will continue to develop self-healing thermoset composites over the next year.

Dr. Mark Blenner, assistant professor of chemical and biomolecular engineering, presented his progress on "Biocatalytic Conversion of Rendered Animal Fats to Value Added Products including Omega-3 Fatty Acids." Over 50 percent of the seafood consumed annually is now raised via aquaculture. Aquaculture feeds require fish oils, but worldwide fish oil supplies are limited and command high prices so Blenner's project is to convert animal fats into omega-3 fats that can be used in aquaculture feeds. He described his laboratory's success in demonstrating that the target microorganism in the study is capable of growing on beef tallow and chicken fat



Dr. Srikanth Pilla (*front*) gives renderers a tour of the Clemson University International Center for Automotive Research at the spring 2015 ACREC meeting.

and is causing the initial transformations needed in eventual conversion of animal fats to omega-3 fatty acids. Blenner will continue this work in another ACREC-funded project during the next year.

Dr. Scott Husson, professor of chemical and biomolecular engineering, gave an update on "Evaluation of Membrane Cleaning Procedures and Determination of Operational Lifetimes for Ultrafiltration Membranes Used to Treat Rendering Facility Wastewaters." This research involved intentionally fouling wastewater treatment membranes with rendering wastewater. The results indicated that two types of evaluated membranes had nearly no irreversible fouling over five cycles and had high flux recovery with a simple water only cleaning step. Husson will shift his focus on rendering wastewater cleanup to a project on low energy concentration of rendering stick water.

Jiang, professor of food science, and graduate student Chao "James" Gong presented their project, "Pilot Study of Applying *Salmonella*-specific Bacteriophages in a Rendering Processing Plant." They determined that employee boots can be a significant source of *Salmonella* cross-contamination in the rendering plant and an ideal target area for applying bacteriophages to reduce *Salmonella* contamination. Their study is continuing on applications of bacteriophages to reduce *Salmonella* in the rendering plant environment.

Dr. Christopher Kitchens, associate professor of chemical and biomolecular engineering, discussed "Carbon Dioxide Enhanced Pressing of Fat from Rendered Materials," in which he described pilot-scale testing of his method of enhanced pressing of fat from rendered solids using carbon dioxide as a green solvent. His laboratory-scale work has indicated that the fat content of poultry meal could be further reduced from 12.1 percent to 2.3 percent using carbon dioxide-enhanced pressing. Kitchens is conducting pilot-scale studies

in collaboration with Crown Iron Works' research and development test facility in Roseville, Minnesota, and their high pressure liquid extraction system to demonstrate scalability. Sanimax in South St. Paul, Minnesota, has supplied the rendered products for use in these pilot-scale tests. Kitchens will continue this project in the next year.

Dr. Vladimir Reukov, research assistant professor of bioengineering, gave an update on his and Dr. Alexey Vertegel's project, "Livestock Feed Preservatives Based on Antioxidant Enzymes Extracted from Animal Blood." They have developed a natural antioxidant from rendered products and are working toward commercialization of the technology. In addition to focusing on methods of optimizing antioxidant application to the surface of dry kibbles, Reukov and Vertegel have also been undertaking a two-year accelerated shelf-life study to assess the long-term ability of their antioxidant to protect products, including cod oil, chicken fat, ground chicken, and meats. The team will continue their efforts next year, validating the antioxidant product is free of viral contamination and performing experiments on temperature dependence of the antioxidant activity.

Whitehead, assistant professor of chemistry, presented the status of his research with Alexis, assistant professor of bioengineering, entitled "Functional Nanomaterials for Remediating Rendering Odors" that focuses on development of technologies to reduce odor emissions from the rendering industry. Their work this past year enabled proof of concept that the technology is capable of capturing and destroying specific odor compounds. The team has filed for a provisional patent on the technology and Clemson University is seeking licensing and/or partnership opportunities to develop the next generation of the nanomaterials for capturing and destroying odors. Whitehead and Alexis will next focus on exploring alternative, streamlined methods of producing the technology and will conduct initial field testing of the technology at a rendering facility.

As highlighted above, Clemson University ACREC researchers remain committed to focusing on unique, applicable projects for the benefit of the rendering industry. **R**

### Washington Continued from page 23

allow for private financing of export/import deals. While the bill removes restrictions on payments to Cuban buyers, it also would prohibit the use of federal dollars to promote or develop Cuban markets, a restriction that could affect cooperator groups' ability to develop this market, including efforts by the National Renderers Association.

In its April 27, 2015, issue, *U.S. News & World Report* reported, "US agricultural exports to Cuba reached a peak of \$658

million by 2008. However, they had fallen by more than half, to \$300 million, by the end of last year. Global agricultural exports to Cuba have doubled over the past decade to \$1.7 billion. According to World Food Program data, Cuba imports about 80 percent of its food, mainly from China, Brazil, and the European Union. Half of American exports to Cuba are poultry products, and [USDA] said there is a potential to gain greater market share for US producers of corn, rice, and dairy since Cuba is less than 100 miles away from the US." **R**

## Can you spot the difference between these two antioxidants?

Oxy-Block® antioxidant



Our competitor's antioxidant



**HINT: It's hiding in your invoice.**

**Ameri-Pac provides high quality natural-source and synthetic antioxidants.** The only ingredients missing from our products are the layers of overhead and associated costs that are often added to competitive contracts – savings we pass on to you. Our products are supported by AIB-rated facilities and professionals who know the rendering industry. After more than 25 years, we still believe the most important thing we can build is the best product at a price that makes sense.

**Call today and discover how we can keep your rendered products fresh for less.**



**Ameri-Pac®**  
Your source for shelf-life technology

Ameri-Pac.com | St. Joseph, MO | 800.373.6156



# New Environmental Regs Remain a Threat

The United States (US) Environmental Protection Agency (EPA) continues to move ahead with various new rules that will have widespread implications for the country’s industries, energy and power sources, and the economy as a whole. The significance for renderers of these rulemakings includes:

- new air regulations that will make for tighter restrictions on boiler emissions, more difficult air permitting, higher fuel costs, and less choices in fuel type; and
- proposed changes in water regulation and the Endangered Species Act that could make new site development activity more difficult, with greater federal oversight.

## New Ozone Standard

In December 2014, EPA proposed lowering the National Ambient Air Quality Standard (NAAQS) for ground-level ozone from the current 75 parts per billion (ppb) to a range of 65 to 70 ppb. At a standard of 65 ppb, 18 of the 20 top-performing metropolitan areas in the United States will be in nonattainment, according to a study completed by the Baton Rouge Area Chamber of Commerce that looked at the impact of the proposed rule. The 20 top metropolitan area economies are so designated based on the Brookings Institution’s assessment of the performance of their economies through the recession and recovery. Included are areas such as Austin, Houston, San Antonio, El Paso, and Dallas, Texas; Nashville, Tennessee; San Jose and Silicon Valley; California; Denver, Colorado; Raleigh, North Carolina; and Charleston and Spartanburg, South Carolina, among others. The study was published on March 2, 2015.

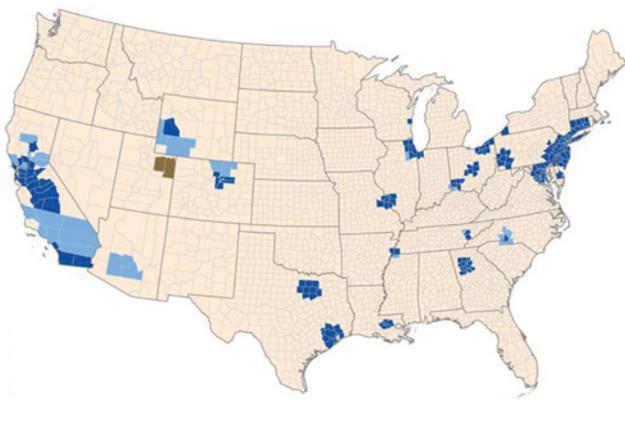
A nonattainment designation for these areas means a loss of industry and economic development due to uncertainty and delays in permitting, requirements that new emissions be

offset in the area in order to build a new facility, requirements to use the best technology for reduction regardless of cost, and other restrictions. In its own study, the National Association of Manufacturers (NAM) concluded that a new standard of 65 ppb threatens the recent manufacturing resurgence, and economic recovery at large, and will result in 1.4 million fewer job equivalents per year through 2040. The NAM study, which was released February 26, 2015, shows a reduction in US gross domestic product of \$1.7 trillion through 2040, making this the most costly EPA rule in US history.

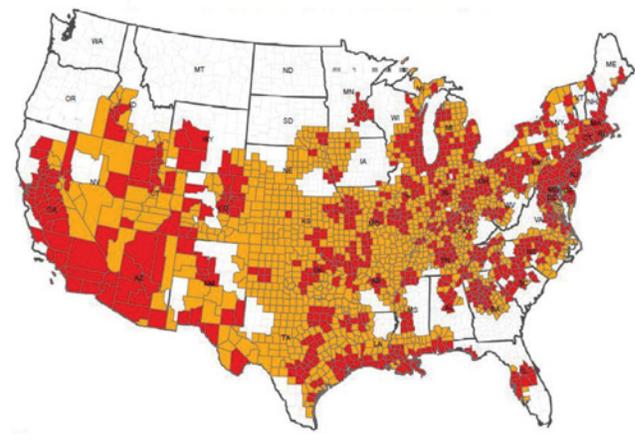
Compare the areas in blue on the map of the continental United States in figure 1, which shows EPA’s 2012 final designation of nonattainment areas under the current standard, to the extensive red and orange areas shown in figure 2, the American Petroleum Institute’s (API’s) projected nonattainment impact under the proposed 65 ppb standard. A nonattainment designation makes the expansion of industry in the nonattainment area nearly impossible, and existing permits can be opened up to require further reductions at existing facilities. Nitrogen oxides (NO<sub>x</sub>) and volatile organic compounds (VOCs) are the pollutants that would be further restricted by this rule since both interact with sunlight to form ground-level ozone. EPA acknowledges that to achieve the proposed standards, additional large reductions in NO<sub>x</sub> and VOC emissions will be required across all sectors of the economy. These reductions cannot be achieved in many areas using existing emission control technology and will require use of controls not even known at this time.

Another aspect of the proposed rule is the effect on rural areas, according to the NAM study. A more stringent ozone standard will result in rural areas being newly designated as “nonattainment.” These areas would typically have few or no existing emission sources that could be controlled to offset increased emissions from new industrial activity. This shortage

**Figure 1. EPA’s 2012 final designation of nonattainment areas under current standard**



**Figure 2. API’s projected nonattainment impact under proposed 65 ppb standard**



of potential offsets in rural oil and gas development areas may also translate into significant barriers for obtaining permits for new wells and pipelines needed to maintain or expand domestic oil and gas production levels.

The study also projects that the proposed rule will put further constraints on coal-fired electricity generation, leading to premature retirement of additional coal-fired plants, increasing electricity costs by 1.7 percent and natural gas prices by 3.7 percent.

According to the NAM report, significant decreases in NO<sub>x</sub> levels have occurred since 1990 under EPA's prior standards, with NO<sub>x</sub> sources projected to be controlled by more than 80 percent by 2025 on an adjusted gross domestic product basis under the current standard. The new standard would require a 90 percent total reduction from all NO<sub>x</sub> emissions sources compared to 1990, after adjusting for growth.

It should be noted that EPA's 2008 ozone standard of 75 ppb has not yet been fully implemented in all areas, thus this is a proposal for further reduction in the standard before the environmental benefits of the current standard are fully realized. In March 2015, two bills with bipartisan co-sponsors were introduced in both houses of Congress (Senate Bill 751/House of Representatives Bill 1388). Known as the CASE Act (Clean Air, Strong Economy), the bills would, among other things, prevent EPA from updating the ozone NAAQS until at least 80 percent of the nonattainment counties achieve compliance with the current standard.

Exposure to ground-level ozone, or smog, is said to exasperate respiratory problems, such as lung disease and asthma. The court-ordered deadline for the revised ozone standard is October 1, 2015.

### Greenhouse Gas Accord with China

In November 2014, US President Barack Obama's administration reached a landmark agreement with China to reduce greenhouse gas (GHG) emissions. Under the agreement, China, the world's biggest emitter of carbon dioxide, set a target for Chinese GHG emissions to peak by "around 2030," while the United States would cut GHG emissions by 25 percent between 2005 and 2025.

This agreement is praised by environmental groups because it brings

China into the fold of industrialized nations interested in curbing GHG emissions. Also, it raises the prospect of a greatly expanded alternative energy market as China agrees to limit the amount of energy produced by fossil fuels to 80 percent.

However, on closer scrutiny, it appears that the non-binding agreement largely preserves the status quo for China. China's agreement for peak GHG emissions around 2030 is consistent with estimates from the US Energy Administration and others that project

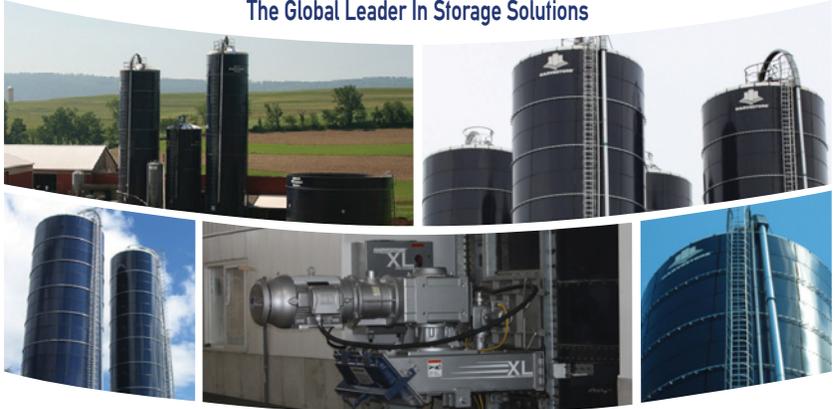
Chinese energy consumption to peak in 20 years anyway due to demographic and urbanization trends. China's agreement to shift at least 20 percent of its energy production to non-fossil fuels is already consistent with China's plans to move from coal to nuclear power in part due to air and groundwater contamination issues associated with the coal power production in China.

Senator Jim Inhofe (R-OK), who is now chair of the Senate Committee on

*Continued on page 31*



**The Global Leader In Storage Solutions**



## GLASS-FUSED-TO-STEEL TANKS FOR MEAT & BONE MEAL STORAGE

### Glass-Fused-to-Steel Tanks

- Controlled First-In First-Out Processing
- Expandable and Movable
- Multi-Purpose Design, Stainless Vents
- Proven Performance, Provides a Lifetime of Value
- Vitrium™ Glass Interior
- PE Stamped Design to Meet Zoning Codes Across the U.S.



### Industrial Unloaders

- Direct Arm Drive System with Load Sensor
- Series 400 – 30 HP and Series 200 – 25 HP use Three Phase Motors. Can Connect with 3-ph Power Source Using a New Advanced Phase Inverter Control System
- Six Unloader Speeds, Switchable During Operation
- Direct Variable Speed Drive System



CST Storage | 345 Harvestore Dr. | DeKalb, IL 60115  
 815-756-1551 | [www.cstindustries.com](http://www.cstindustries.com)

©2015 CST Industries Inc. Harvestore XL Unloader and Vitrium are trademarks of CST Industries, Inc.

# Mark Your Calendar

## June

**National Renderers Association Central Region Convention**  
June 10-12, Fontana, WI • e-mail Mike Owens at [mike@krugerinc.com](mailto:mike@krugerinc.com)

## July

**13th Australian Renderers Association International Symposium**  
July 21-24, Gold Coast, Queensland • [www.arasyposium.com.au](http://www.arasyposium.com.au)

## August

**Association of American Feed Control Officials Annual Meeting**  
August 2-7, Denver, CO  
[www.aafco.org](http://www.aafco.org)

**8th Annual Waste Conversion Technology Conference and Trade Show**  
August 17-19, San Diego, CA  
[www.wasteconversionconference.com](http://www.wasteconversionconference.com)

## September

**8th Annual National Aboveground Storage Tank Conference and Trade Show**  
September 16-17, Galveston, TX  
[www.nistm.org](http://www.nistm.org)

**5th International Symposium on Animal Mortality Management**  
September 28-October 1, Lancaster, PA  
[www.animalmortmgmt.org](http://www.animalmortmgmt.org)

**2015 Feed and Pet Food Joint Conference**  
September 29-October 1, Columbus, OH  
[www.ngfa.org](http://www.ngfa.org)

## October

**Poultry Protein and Fat Seminar**  
October 1-2, Nashville, TN  
[www.uspoultry.org](http://www.uspoultry.org)

**National Renderers Association 82nd Annual Convention**  
October 19-23, Laguna Niguel, CA  
<http://convention.nationalrenderers.org>

Log on to [www.rendermagazine.com](http://www.rendermagazine.com) for a complete updated listing of industry meetings.

**Secure the Contents of Your Bins, Containers and Trucks**  
Lock America delivers a full range of security locks:

- Thousands of security key codes
- Unique key codes for each customer
- Drill and pick-resistant options available

Great for dumpsters & collection bins.

Brass body with hardened steel shackle.

10,000 key combinations.

Set your own combination.

Ask about our key control program to deter theft

Get your own unique key combination.

Available in 7 colors and 2 sizes.

**800-422-2866**  
**LOCK AMERICA** INC.  
The Definitive Word in Locks

9168 Stellar Court  
Corona, CA 92883  
[www.laigroup.com](http://www.laigroup.com)  
E-mail: [sales@laigroup.com](mailto:sales@laigroup.com)

**951-277-5180**  
**Fax 951-277-5170**

**MOVING??**

Send old and new address to:  
P.O. Box 1319  
Camino, CA 95709-1319

Fax: (530) 644-8429

[www.rendermagazine.com/subscribe](http://www.rendermagazine.com/subscribe)

**Tech Topics** *Continued from page 29*

Environment and Public Works, called the pact a “non-binding charade.” It is anticipated that the agreement will be used as the basis for proposing aggressive new carbon regulations that cannot be readily justified based on their cost and will be cited to neutralize any argument that aggressive one-sided carbon regulation in the United States is pointless if China has not signed onto the anti-carbon agenda.

**Waters of the US**

In April 2014, EPA proposed rules revising the definition of “waters of the US,” also known as WOTUS, greatly expanding EPA’s jurisdiction over activities in wetlands, intermittent streams, drainage ditches, and upland areas. This proposed rule was supposed to clarify the scope of federal jurisdiction over upland and isolated waterways, but is widely seen as a huge power grab by EPA and the US Army Corps of Engineers.

On January 15, 2015, a report by EPA’s Science Advisory Board was released that confirmed a significant link, or “connectivity,” between isolated water bodies such as noncontiguous wetlands and the downstream waters. The report concluded that all streams, regardless of size, affect downstream waters and that wetlands and floodplains are integrated with rivers.

This rulemaking has been strongly opposed by agriculture groups. The American Farm Bureau Federation stated that “EPA and the Corps are now attempting to regulate virtually all water.” EPA received over one million comments on the proposed regulation.

In February, EPA withdrew a portion of the rule as per a provision in the spending bill passed by Congress. The portion of the rule withdrawn related to certain voluntary farming conservation practices under the US Department of Agriculture’s Natural Resources Conservation Service (NRCS); the section withdrawn essentially would have made these voluntary programs mandatory.

**Endangered Species**

In May 2014, the Department of the Interior’s US Fish and Wildlife Service proposed two new rules that would significantly expand critical habitat

designations under the Endangered Species Act. The new rules could result in far more restrictions on activities in critical habitat areas as well as in locales where the species does not live but that may be beneficial to the species, such as areas that could be future habitats.

By expanding the scope of potential areas of critical habitats or the scope of activities that constitute the destruction or adverse modification of critical habitats, it is much more likely that any construction activity or use of a site will affect a critical habitat and therefore be subject to federal oversight and restriction, require federal permits and authorizations, and result in more restrictions on project development and operations to minimize impacts to critical habitats.

This has been described as one of the most important regulatory developments under the Endangered Species Act in 30 years. The agency is reviewing comments received on the proposed rules.

In addition to this rulemaking, the Fish and Wildlife Service is reviewing over 750 species for designation as “threatened” or “endangered” under the act in response to legal challenges. It is expected that this will result in a large number of newly-designated species affecting a broad range of habitats across the United States, making it more difficult to undertake a project

without encountering “threatened” or “endangered” species or their habitats. Under the act, even projects that do not involve federal permitting or funding must avoid activities that constitute a “taking,” “harming,” or “harassing” of threatened or endangered species.

**Stormwater**

This summer, EPA is expected to finalize a new general permit for industrial stormwater that will become the template for individual states as they reissue their general permits over a five-year cycle. Currently, benchmarks are used as a reference point to demonstrate performance of best management practices. Exceeding benchmarks in stormwater discharge does not alone form the basis for enforcement.

It remains to be seen whether in this permit EPA will move away from benchmarks and toward the use of enforceable numeric limits based on nutrient load conditions and allocations for the affected waterways. **R**

*Robert T. Vogler is director of environmental affairs for Valley Proteins Inc. and chairman of the National Renderers Association’s Environmental Committee. He holds a juris doctor degree from Duquesne University and bachelor of science degree in agricultural engineering and agricultural science from Rutgers University.*

**ALUMINUM TRAILERS  
BUILT WITH PRIDE TO LAST FOR  
YEARS OF DEPENDABLE SERVICE**

Extruded Hollow Wall Construction • Spring or Air Suspension • Heavy Duty Hydraulics  
Leak Proof Gates! Two Point Controls • Compartments for Material Separation  
2 & 3 25,000 LB Axles • Lift Axles, Hydraulic Lid & Hitch Options

**ARTEX**

**CALL 888.644.2893 TO ORDER  
REDWOOD FALLS, MN - ARTEXMFG.COM**

# FDA to Review Feed Ingredient Definitions

The United States (US) Food and Drug Administration (FDA) is moving forward to reconcile the legal requirement in the FDA Amendments Act of 2007 for animal food “standards” with the American Association of Feed Control Officials (AAFCO) “definitions” process that has been in place for nearly 100 years. FDA lawyers ruled about three years ago that standards and definitions are not the same thing, an interpretation that could bring chaos to the US feed industry. A memorandum of understanding agreement between FDA and AAFCO moves to make the animal food definitions acceptable as standards.

FDA will review feed ingredients as currently defined in AAFCO’s *Official Publication* to affirm their safety while meeting the requirements of the Amendments Act that orders FDA to establish ingredient standards. Although animal food ingredient definitions and standards generally do not vary widely across the industry, this review will align the AAFCO ingredients with FDA’s processes and regulatory requirements.

AAFCO is a voluntary membership organization of regulatory officials of US state and federal government agencies that provides a forum to offer guidance and recommendations to ensure that the regulation of animal feeds is as uniform as possible from state to state. The *Official Publication* includes FDA-approved food additives and ingredients that are generally recognized as safe (GRAS), as well as AAFCO-established definitions for other ingredients. FDA intends to align AAFCO ingredient listings with the agency’s regulatory process and requirements.

FDA has identified the following steps for animal food ingredients:

- FDA intends to publish a proposed rule that will establish as the agency’s standards and definitions for animal food ingredients the AAFCO definitions for those ingredients that are recognized as GRAS or approved by the agency as food additives. This



proposed rule will be open for public comment and the agency will consider those comments before issuing a final rule.

- FDA scientists will evaluate the remaining animal food ingredients listed in the AAFCO *Official Publication* that are currently not FDA-approved food additives or recognized as GRAS.
  - In cases where the scientific literature supports a GRAS determination, FDA will publish the supporting information in the *Federal Register* for public comment before affirming the ingredient as GRAS.
  - In cases where the data and information support a finding that the ingredient meets the food additive approval standard, FDA intends to approve the ingredient as a food additive.
  - In cases where FDA does not currently have data to make a GRAS determination or to approve the ingredient as a food additive, the agency will require manufacturers of these ingredients to submit a food additive petition in order to allow continued legal use of the product in animal food.

FDA has not established a timeframe for completing these actions and has not yet determined what ingredients will fall into which scenario described above. The agency intends to work closely with industry during this transition to minimize disruption to animal food production and ensure transparency and clarity for both manufacturers and the public. The National Renderers Association (NRA) will be watching closely, but expects most rendered products to end up on the list of GRAS ingredients with no added data needed. If additional approvals are needed, there will be some time to acquire required data. NRA will continue to work with industry allies to ensure a smooth implementation of this strategy and to get the AAFCO *Official Publication* recognized in federal law. **R**

## Biosecurity Guide for Feed and Ingredients Updated

In 2014, the United States swine industry was devastated when porcine epidemic diarrhea virus (PEDv) infected more than 10 percent of the nation’s pigs, with many cases fatal.

Late last year, the American Feed Industry Association (AFIA) asked its members how PEDv had impacted their operations and for recommendations on how AFIA staff could better inform and direct its membership on controlling the spread of the virus. The responses received included working with industry leaders to develop intervention strategies to prevent or minimize the spread of animal disease, and updating the 12-year-old AFIA biosecurity guide to address specific information and controls needed for the feed industry to reduce or halt the spread of viruses or pathogens that may be detrimental to animal health.

An Animal Feed/Animal Health Biosecurity Working Group was formed to provide input and direction for developing AFIA

recommendations for biosecurity for the feed industry, not only for controlling PEDv, but other disease vectors as well. The group was comprised of AFIA members and other industry leaders, including individuals from American Proteins/Proliant, Darling Ingredients Inc., and the National Renderers Association.

Taking rendering interests into consideration, the guide was updated to provide feed and ingredient manufacturers with recommendations that may be used to develop a biosecurity plan to control the potential spread of animal diseases through feed and feed ingredients. It is consistent with the *North American Rendering Industry Code of Practice* and follows hazard assessment methods that will be important as new feed regulations come into effect next year.

The new guide, *Developing Biosecurity Practices for Feed and Ingredient Manufacturing*, is at [www.afia.org](http://www.afia.org). **R**

# Congress Passes Alternative Fuel Credit

By Charles Neece

In December 2013, the alternative fuel credit of \$0.50 per gallon expired along with the \$1.00 per gallon biodiesel and renewable diesel tax credits, leaving many producers of these fuels pricing their products accordingly in 2014 without certainty of renewal. Many hoped for a retroactive passing as had happened in the past.

As 2014 came to a close, the United States Congress signed Public Law 113-295 authorizing retroactive claims only for alternative fuel credits for 2014, but with no proposal for 2015. It would be wise to keep records of use for 2015 so that credits might be taken if legislation is passed putting the credit into law for the current or future years. It took until February 9, 2015, for the Internal Revenue Service (IRS) to publish the schedules and set the claim rules for alternative fuels used and sold in 2014. The rules were published with a one-time claim procedure to be followed in order to meet the requirements for credits.

So who and what fuels qualify?

1. The claimant must be registered as a Form 637 AL or AM registrant for any fuel claiming the alternative fuel credit.
2. IRS guidance document 2006-92, pages 774 to 776, explains how usage of the alternative fuel meets the claiming criteria. In addition, IRS publication 510 addresses excise taxes and credits, including the use of alternative fuels in a furnace or boiler for heat.
3. Only one claim is allowed for all qualified uses in 2014, as long as claimant only has one 637 registration under its federal employer identification number.
4. Alternative fuels include liquid propane gas, compressed natural gas, liquid fuel from biomass

(yellow grease qualifies), and methane from biomass (anaerobic production). The alternative fuels must meet ASTM International standards or an equivalent standard as recognized by IRS.

5. Alternative fuels must have been mixed with a 0.1 percent taxable fuel with auditable records showing legal measurement and use or sales records.
6. Fuels for on-road use must have proof of payment of excise taxes at time of sale.
7. Claimant must be current on payment of excise taxes to file for a credit.
8. An alternative fuel credit may not be claimed if the fuel was eligible for a credit under any other tax program (in other words, no double dipping).

Once it is determined a claimant qualifies, file IRS Form 8849 and Form 8849, Schedule 3. The gasoline gallon equivalent of the fuel must be known for which a credit is being claimed. For yellow grease, convert or measure the fuel in gallons, then multiply by the British thermal unit (BTU) factor to get the equivalent. Nominally, yellow grease is 85 percent of the BTU value of gasoline. If the gasoline gallon equivalent is not known, it will need to be determined in a table. The equivalency for some fuels is provided on the form.

If unsure whether a specific usage qualifies for the alternative fuel mixture or alternative fuel credit, seek competent tax advice. The alternative fuel mixture credit can only be filed on IRS Form 720X while the alternative fuel credit can only be filed on IRS Form 8849. The alternative fuel mixture credit has not yet been renewed.

All claims for a one-time payment for 2014 must be filed no later than August 8, 2015. Specific questions on excise taxes can be referred to Amanda Dunlap at the IRS at (202) 317-6855. **R**

## Nominees Sought for NRA's new Leadership Award

To recognize outstanding leaders in the North American rendering industry, the National Renderers Association (NRA) Board of Directors has created the Don Franco Distinguished Service Award to honor a member, staff, or friend of the association for meritorious service to the rendering industry. During Franco's distinguished and lengthy career in government and the private sector, he was highly respected and developed many good friends and colleagues in the rendering industry and in agriculture. He served as both vice president of NRA's scientific services and president of the Animal Protein Producers Industry organization for 11 years from January 1992 until his retirement in December 2002. Franco passed away earlier this year.

Franco was also one of the editors of *The Original Recyclers* published by NRA in 1996 and a contributing author to *Essential Rendering* in 2006. Prior to NRA, he served as director of slaughter operations for the United States Department of Agriculture's Food Safety and Inspection Service. Franco held a master of public health degree and a doctorate in veterinary medicine. He cared deeply about the

rendering industry and the plight of poverty in third-world countries.

The Don Franco Distinguished Service Award is intended to recognize outstanding work by a dedicated individual who exemplifies Franco's legacy to the rendering industry in science, policy, marketing, or communications. Examples of the commitment this award will recognize are in communicating scientific principles to protect the interests of the industry, facilitating new market segments for rendered products, discovering new technologies for the improvement of sustainability and efficiency of rendering, and/or successful political influence allowing the industry to prosper and grow. The winner will be selected by the NRA Executive Committee and announced at NRA's annual convention in October.

Nominations are due September 1, 2015. Nomination forms are available on NRA's website at [www.nationalrenderers.org](http://www.nationalrenderers.org), or by request to [balexander@nationalrenderers.com](mailto:balexander@nationalrenderers.com), (703) 683-0155. For more information, contact Nancy Foster at [nfoster@nationalrenderers.com](mailto:nfoster@nationalrenderers.com). **R**



# Get Ready, Get Set, Go for Hazard Communication

*Editor's note – Mark A. Lies II is a partner with the Chicago, Illinois, law firm of Seyfarth Shaw LLP. He specializes in products liability, occupational safety and health, workplace violence, construction litigation, and related employment litigation.*

*Patrick D. Joyce is an attorney in the Environmental, Safety, and Toxic Tort Group of Seyfarth Shaw who focuses his practice in the areas of occupational safety and health, environmental litigation, environmental counseling, and construction litigation. Legal topics provide general information, not specific legal advice. Individual circumstances may limit or modify this information.*

Are you ready for the new safety data sheet (SDS) requirements? Failure to properly provide or respond to new SDS information could open the door to an Occupational Safety and Health Administration (OSHA) inspection and enforcement activities, including citations and significant penalties for violating the Hazard Communication Standard (HCS) 2012 (29 Code of Federal Regulations (CFR) 1910.1200).

OSHA adopted new HCS 2012 SDS standards on December 1, 2013, to harmonize material safety information with the new Globally Harmonized System of Classification and Labeling of Chemicals created by the United Nations to ensure uniformity in communicating information about hazardous materials across the globe. Starting June 1, 2015, manufacturers must stop sending the old material safety data sheets (MSDSs) and send the new SDSs instead. Chemical end users have until June 1, 2016, to respond to new SDSs passed down from upstream suppliers and manufacturers in the workplace. This one-year period presents a very short time frame in which an employer can respond to the new and updated information contained on potentially hundreds of SDSs and be compliant by June 1, 2016.

## SDS Impact on Employer Safety Program

Employers must not be too quick to simply swap in a new SDS for an old MSDS and throw away the old data sheets. Previous MSDSs should be kept on file for several reasons:

- To prove that an employer was compliant with the old hazard communication standard.
- The prior MSDSs can be useful evidence in defending against workers' compensation claims by employees for occupational diseases alleged to have arisen from exposure to hazardous materials during the course of employment.
- The prior MSDSs can be useful evidence in defending third-party toxic tort claims alleged to have been caused by exposure to hazardous materials that the employer may have incorporated into products manufactured and sold by the employer or by-products that are resold or distributed by the employer.

The new SDSs present an opportunity for employers to update their training, hazard communication, and safety

procedures for chemicals. The new SDSs must include 16 separate sections, some of which are similar or identical to the existing MSDS sections. There are, however, a number of significant changes and compliance challenges.

Enforcement for manufacturers began June 1, 2015. Not only will OSHA be looking to see that a manufacturer has properly prepared new SDSs, it will also be examining whether the manufacturer went through a process to identify new risks that may not have previously been known. When OSHA begins enforcement against employers on June 1, 2016, it will focus on whether the employer has reviewed the SDSs to identify any new risks as well as whether it has evaluated its existing compliance programs in light of the 16 requirements in the new SDSs.

Below are brief descriptions of each section in the new SDS, as well as some questions employers should ask to ensure employees are provided a safe place to work and that they are compliant with their hazard communication program as well as other OSHA compliance programs that relate directly to the hazardous substances identified in the SDS.

## SDS Sections

**Section 1** – Identification of a chemical to include product identifier; manufacturer or distributor name, address, and phone number; emergency phone number; recommended use; and restrictions on use.

When updating to the SDS, use this as a chance to identify each chemical used and what it is needed for at the workplace. Make sure inventory is up to date and includes the proper information regarding each chemical, including potential hazards and chemical interactions. It is important to keep handy information on the manufacturer and distributor of each chemical so questions regarding each chemical can easily be answered. Keep a list of all emergency phone numbers in an easy-to-reach area to help first responders in an emergency situation.

Questions employers should ask:

- Is it clear what this chemical is and what it is used for?
- Do we know how to get in touch with the manufacturer of this chemical?
- Do we know who to call in an emergency?

**Section 2** – Hazard(s) identification to include all hazards regarding the chemical and required label elements.

When each new SDS is received, take note of each specific hazard identified and whether a comprehensive plan is in place to handle the hazard (e.g., fire, explosion, exposure) for each type of chemical. In addition to the traditional National Fire Protection Association identifiers, the new SDS includes standardized pictograms identified in HCS 2012. Using the standardized pictograms should help speed up a response if someone is injured or there is a spill. Section 2 also includes information regarding the specific hazards of each chemical

as well as required prevention and response measures, such as using non-sparking tools for flammable materials or flushing eyes if the chemical gets on the face.

Questions employers should ask:

- Is it clear what hazards this chemical poses?
- Have the hazards of this chemical been properly communicated to employees?
- Are containers holding this chemical properly identified and labeled?

**Section 3**—Composition/Information on chemical ingredients and trade secret claims.

Use information from this section to determine whether a chemical or mixture could be potentially lethal to employees if mishandled. This section includes the lethal concentration information that needs to be carefully examined. Use each new SDS as an opportunity to identify chemicals to include in a hazard communication plan.

Questions employers should ask:

- Do we know what is contained in this chemical?
- Do we know the potential lethality of this chemical and how to update employee training to take that lethality into account?

**Section 4** - First-aid measures to include important symptoms/effects, acute, delayed, and required treatment.

Employers ought to examine and update, if necessary, health and safety plans, specifically first-aid and cardiopulmonary resuscitation training plans. When transitioning to the new SDS, it is important to review each one for new information regarding first-aid measures as the measures recommended on the new SDS may differ from the old MSDS. OSHA will closely monitor how companies update first-aid training in response to new information contained on each SDS.

Questions employers should ask:

- Do employees have proper training to deal with human exposure involving this chemical?
- Does the employer's personal protective equipment (PPE) hazard assessment need to be updated to identify

necessary equipment? (29 CFR 1910.134)

- Do we have the proper PPE necessary when responding?
- Are the proper first-aid supplies available to assist first responders? (29 CFR 1910.120 and 1910.151)
- Is the proper equipment easily accessible to rinse or flush if an employee is exposed to this chemical? (29 CFR 151(c))

**Section 5** – Fire-fighting measures to list suitable extinguishing techniques and equipment, and chemical hazards during fire.

Review and revise emergency response plans, especially fire-fighting measures and training, if necessary. When transitioning to the new SDS, it

is essential to look over each for new information regarding fire-fighting measures as they may differ from the old MSDS. For example, the MSDS may recommend a method that allows a particular type of extinguishing agent to be used, but the new SDS will recommend a different type of extinguishing agent. OSHA will closely monitor how companies update fire-fighting training and responses as a result of new information contained on each SDS. If the employer is subject to the Process Safety Management regulation (29 CFR 1910.119), it may have to conduct a wide variety of actions, such as a process hazard analysis, to be compliant.

*Continued on page 36*

## Centrifuge Chicago Corporation

**• Balancing • Centrifuge Parts • Repairs**  
Disassembled, cleaned, inspected, and repaired to bring the centrifuge back to specification.

Other services available include field service, technical service, rebuild, buy, sell, and upgrade on all types of makes and models of centrifuges.



**[www.centrifugechicago.com](http://www.centrifugechicago.com)**  
**(219) 852-5200**



**Check out the NEW Zeco®Eco. The latest in Waste Oil Filtration, Transportation, Oil Resupply!**

**6 Models:**

**Shortening Shuttles®**



**Order Fact. Authorized Parts ONLY!**

**800-533-5711** [www.Shortening-Shuttle.com](http://www.Shortening-Shuttle.com)  
Worcester Industrial Products Corp.

Questions employers should ask:

- Does the employer have to update its emergency action plan? (29 CFR 1910.38)
- Do employees have proper training to deal with a fire involving this chemical? (29 CFR 1910.120, 29 CFR 1910 Subpart L)
- Are the proper fire extinguishers on hand? (29 CFR 1910.120 and 1910.157)
- Is the proper protective clothing for fire-fighting operations on hand? (29 CFR 1910.134, 29 CFR 1910 Subpart L)
- Do we know what effect a certain fire-fighting agent will have when used on this chemical?

**Section 6 – Accidental release** measures to list emergency procedures, protective equipment, and proper methods of containment and cleanup.

Each employer should analyze this section of the new SDS to determine what new or additional emergency procedures, including methods of containment and cleanup, might need to be implemented at a facility. Also, it is important that employers identify new protective equipment that is to be used when responding to an accidental release of a listed chemical. OSHA will

be looking to make sure an employer does not simply swap an old MSDS for a new SDS. Rather, each company needs to fully analyze an SDS to determine whether new measures or trainings need to be implemented.

Questions employers should ask:

- Do we have the correct program and equipment to respond quickly and safely to a spill? (29 CFR 1910.120)
- Do we have the correct equipment to protect internal or outside first responders?
- Do we have the correct equipment and materials to prevent a release from spreading?
- Do we have the correct equipment to clean up a release?

**Section 7 – Handling and storage** to list precautions for safe handling and storage, including incompatibilities.

Employers ought to review their handling and storage techniques to ensure each chemical is in its proper container, is handled in the proper manner, and is stored in a manner so as to not potentially expose employees to additional hazards. This section also identifies incompatibilities between the listed chemical and other chemicals so closely analyze this section to determine what other chemicals the listed chemical must not come in contact with.

Questions employers should ask:

- Do we know what containers this chemical should be stored in (or not stored in)? (29 CFR 1910.106)
- Do we know how to properly move this chemical around the facility? (29 CFR 1910.178)
- Do we know how to properly store this material? (29 CFR 1910.176)
- Do we know what other chemical this chemical must not come into contact with?

**Section 8 – Exposure controls/ personal protection** to list OSHA's permissible exposure limits (PELs), threshold limit values (TLVs), appropriate engineering controls, and PPE.

Companies need to pay special attention to recommended engineering controls and PPE. When each new SDS is received, an employer needs to analyze the PPE required for a particular chemical to ensure PPE provided to employees is appropriate. It is vitally important that an employer not simply swap an old MSDS for a new SDS as the recommended engineering controls and PPE may have changed significantly, leaving an employer open to OSHA enforcement and penalties if proper PPE is not provided. Also note applicable PELs and TLVs, and conduct regular monitoring to ensure employees are not overexposed to a particular chemical.



**Orthman**  
CONVEYING SYSTEMS

FAST • SMOOTH • EFFICIENT

At Orthman Conveying Systems we have the capability to design and manufacture bulk material handling systems of any scope. Quality assurance is #1. Our products are factory tested before shipment in order to assure the highest quality. Our proof lies in the testimonies of thousands of customers whose expectations have been surpassed. We have one goal: To produce conveyor equipment that pays it's own way!

Orthman Conveying Systems  
Lexington, NE  
877-664-2687 • conveyusa.com

proud member:



**NRA**  
NATIONAL RENDERERS ASSOCIATION



**5<sup>th</sup> International Symposium**

Managing Animal Mortalities, Products, By-products & Associated Health Risks: Connecting Research, Regulations & Responses

September 28 - October 1, 2015  
Lancaster, Pennsylvania  
animalmortgmt.org



**INSTITUTE FOR INFECTIOUS ANIMAL DISEASES**

In collaboration with world-wide academia, industry and government partners.

This event was made possible with funding from the Department of Homeland Security, Science & Technology Directorate.

Questions employers should ask:

- Does the employee have to conduct industrial hygiene monitoring if the PELs or TLVs have changed? (29 CFR 1910.1000 Tables Z-1, Z-2, and Z-3, existing requirements for a substance, and General Duty Clause Section 5(a)(1))
- Do employees have the proper PPE to use this chemical?
- Can we feasibly implement the recommended engineering controls?
- Is proper testing being conducted to see if PELs and TLVs are exceeded?
- If levels are exceeded, how can we bring PELs and TLVs below applicable limits? By using engineering controls?
- If engineering controls are not feasible, what administrative controls or PPE must be used?

**Section 9** – Physical and chemical properties to list the chemical’s characteristics.

Employers may need to update the training of all employees on properties of a particular chemical so employees are aware of its physical properties and can help identify whether a release has occurred so they know the immediate steps to take.

Questions employers should ask:

- Has proper training been conducted?
- Is documentation of training adequate?

**Section 10** –Chemical stability and possibility of hazardous reactions.

This section identifies incompatibilities between the listed chemical and other chemicals. An employer should closely analyze this section to determine what other chemicals the listed chemical must not come in contact with. This section also presents an opportunity for an employer to modify its storage and handling procedures, also identified in section 7.

Questions employers should ask:

- Do we know what other chemicals this chemical will react with in a negative way?
- Do we know how reactive this chemical is on its own?
- What precautions need be taken to ensure this chemical does not react?

- How does this chemical need to be stored to avoid reactions and maintain stability?

**Section 11**–Toxicological information to include routes of exposure, related symptoms, acute and chronic effects, and numerical measures of toxicity.

Employers ought to train employees to recognize symptoms of exposure to a particular chemical. Training needs to be updated to include new information regarding a particular chemical gathered from the new SDS and to inform employees as to the routes of exposure to help them understand how to avoid exposure to a chemical.

Questions employers should ask:

- How could employees be

exposed to this chemical?

- What symptoms will an employee show if they are exposed to this chemical?
- How can this information be passed on to first responders and treating physicians to ensure proper treatment?
- Does training adequately inform employees of all potential routes of exposure and symptoms?

While OSHA will not be involved in enforcing sections 12 through 15, they will fall under the enforcement authority of other administrative agencies.

*Continued on page 39*

## Hazard Communication Guide Available

The National Grain and Feed Association and American Feed Industry Association have released a compliance guide to assist grain handling, feed, ingredient, and processing facilities in meeting new compliance requirements under the Occupational Safety and Health Administration’s (OSHA’s) Hazard Communication Standard (HCS).

The primary implication of the new standard is that shipped raw grains and oilseeds, as well as some feeds and ingredients, must now comply with OSHA’s requirement to issue a revised safety data sheet (SDS), formerly known as a material safety data sheet. The HCS compliance guide provides sample SDS language, explains labeling requirements, summarizes the changes, and answers frequently asked questions on combustible dust, SDS and labeling requirements, transportation, bulk or bagged feed sold to feed dealers of farms, and Environmental Protection Agency requirements.

For more information on the nearly 50-page guidance document and to download a free copy, visit [www.afia.org](http://www.afia.org).

R

**Grease Handling Equipment**

Powder Coat Paint & Steel Lid Systems

**Containers**

- 100 to 400 gallon
- Poly or steel lids
- Pressure tested
- Powder coat

**Options**

- Bolt-in screens
- Lid locks & more

**Par-Kan**  
C O M P A N Y

800-291-5487 • [www.par-kan.com](http://www.par-kan.com) • Silver Lake, IN

## Industry Bids Farewell to Two Leaders

April saw the passing of two men who provided insight, experience, and passion to the rendering industry in the form of their work and involvement with the National Renderers Association (NRA).

Dennis B. Griffin, former president and chief executive officer of Griffin Industries, died April 3, 2015. He was 72. The oldest of 12 children, Griffin was highly respected in the rendering industry and held many patents for revolutionary processes in his field. He was very active in NRA and the Fats and Proteins Research Foundation, committing his time, effort, and financial support. Griffin was a leader during the bovine encephalopathy crisis in the United States in the early 2000s, representing the rendering industry at meetings with the Food and Drug Administration and other government agencies to help manage the situation. He was also a pioneer in the exploration of using animal fats as a feedstock in the production of biodiesel in the early 1990s.



Dennis Griffin

Griffin was also known for his passion for others and his generosity. He was a philanthropist and charitable supporter of numerous schools, churches, and organizations as well as a highly regarded community leader. Griffin is survived by his wife, Joyce, three children, five grandchildren, and many other family and friends. In lieu of flowers, memorial donations may be made to Covington Catholic High School, 1600 Dixie Highway, Park Hills, KY 41011 ([www.covcath.org/gift](http://www.covcath.org/gift)), the Emergency Shelter of Northern Kentucky, 634 Scott Boulevard, Covington, KY 41011 ([www.emergencyshelternky.org/donate](http://www.emergencyshelternky.org/donate)), or the St. Pius Building Fund, 348 Dudley Road, Edgewood, KY 41017.

Two weeks after Griffin's death, Mark McMahon, assistant vice president of rendering solutions at Cargill Beef in Wichita, Kansas, died. He was 55.

McMahon began his career with Cargill Beef in January 1983, working in its processing plant in Dodge City, Kansas. In 1990, he moved to Wichita in a rendering and pet food management role and has held a number of positions in the Cargill Beef by-products group. McMahon was also a longstanding member of the NRA Board of Directors and has a bachelor of science degree in business management from Newman University.

"Mark always worked hard to ensure that Cargill's best interests were served and we are better for knowing him as a professional and as a friend," said John Keating, president, Cargill Beef. "He personified the values that Cargill holds dear and will be missed."

McMahon is survived by his wife, Gayle, three children, and many other family and friends. A memorial for McMahon has been established with Central Catholic High School, 419 E. Decatur Street, West Point, NE 68788 and Bishop Carroll Catholic High School, 8101 W. Central, Wichita, KS 67212.



Mark McMahon

## Wilks and Topper Founder Dies

Steve Wilks, founder and owner of Wilks and Topper Inc. in Oakland, California, passed away May 1, 2015, after a short illness. He was 62.

Wilks began his commodity brokerage company in 1982. He was a devoted and well-known rendered product broker on the West Coast and a longtime associate member of the National Renderers Association. As one colleague said in remembering Wilks, "Everyone has a Steve Wilks story."

Wilks is survived by a brother, two nephews, and a niece.

## Frontline Hires New Sales Manager

Frontline International, a leading provider of oil management systems for foodservice operators, has appointed Zachary Palazzo as sales manager for clients in the United States and internationally. He is a graduate of Purdue University and holds a bachelor of science degree in industrial technology.

## National Beef to Sell California Plant

National Beef Packing Company LLC has reached an agreement to sell its Brawley, California, beef slaughter and processing facility to One World Beef LLC, a Buena Park, California-based meat sales and marketing agent. The transaction is contingent upon various regulatory approvals and conditions. Terms of the sale were not disclosed.

"My family was involved in the original development of the Brawley facility and we supplied cattle to the facility since it opened in 2001," said Eric Brandt, president of One World Beef. "We look forward to deepening our partnership with the community by creating jobs and opportunities for local, independent ranchers to process and market their products." The company is aiming to begin operations in the fourth quarter of 2015.

According to its website, One World Beef is the exclusive agent exporting both Brandt Beef and Harris Ranch products to

restaurants, chefs, and distributors worldwide,



and importing "Genuine Japanese Wagyu" Kagoshima Beef to the Brandt Company, of which Eric Brandt is managing partner. The Brandt Company is independently owned and operated from One World Beef and has no plans to change relationships with processing and packing partners, it was stated in a press release.

## Pet Food Institute Names New President

Cathleen Enright, PhD, has been named the new president and chief executive officer for the Pet Food Institute.

Enright most recently served as executive vice president of food and agriculture for the Biotechnology Industry Organization, where she spearheaded the development and launch of GMO Answers, an industrywide initiative to address negative perceptions about genetically modified organisms (GMOs). Prior to this, Enright led federal government affairs for the Western Growers Association and served in senior roles across the federal government, including policy analyst for the Department of State; assistant deputy administrator, Animal and Plant Health Inspection Service, United States Department of Agriculture; and as deputy assistant in the Office of the United States Trade Representative.

## Video Gives Inside Look at Poultry Processing

The United States (US) Poultry and Egg Association has released a new video that takes a behind-the-scenes look at today's high-tech, highly efficient poultry processing plants and highlights the food safety and sanitation practices employed by the modern poultry industry. The video begins as the birds are collected from family farms and delivered for processing. It discusses humane stunning and slaughter, worker safety, bacteria control strategies, government inspection and microbial testing, plant sanitation, and proper consumer handling to prevent foodborne illnesses.

The video, "An Inside Look at US Poultry Processing," is viewable on US Poultry's website at [www.uspoultry.org](http://www.uspoultry.org) and on YouTube.

*Section 12* – Ecological information. The Environmental Protection Agency (EPA) or a local environmental agency will actively monitor companies to ensure any new or updated information on ecological impacts for a particular chemical are taken into consideration and changes are made to the way an employer handles, stores, and uses a chemical.

*Section 13* – Disposal considerations. EPA or a local environmental agency will actively monitor companies to ensure any new or updated disposal requirements contained on the SDS are met.

*Section 14* – Transport information. Other agencies will actively monitor companies to ensure any new or updated transport and labeling requirements contained on the SDS are met.

*Section 15* – Regulatory information. This section contains valuable information regarding specific or general regulations that address a particular chemical. It is not enough that an employer simply review this section. Each company needs to be familiar with the specific regulatory information contained in this section to be able to identify particular hazards and areas of potential enforcement exposure.

*Section 16* – Other information to include the date of preparation or last revision. OSHA will look to this section to ensure that all information contained on an SDS is up to date based on current understanding of a chemical's characteristics and current regulatory standards. Each company should regularly analyze chemical characteristics or contact a chemical's manufacturer to ensure an SDS is current.

### Recommendations

The Hazard Communication Standard affects nearly every employer, from chemical manufacturers to retailers to hotels whose employees work with cleaning agents. Employers need to be aware of their obligations to communicate hazards of chemical substance, and must have a process for updating existing labels, SDSs, hazard assessments, and training programs to comply with HCS 2012. To that end, it is recommended that:

- Employers review the new SDSs in a timely fashion upon receipt. If the employer does not receive the SDSs in a timely fashion, promptly communicate with the manufacturer to obtain the SDSs.
- Employers evaluate the workplace using the new SDSs to identify hazardous chemicals and how employees may be exposed.
- Employers whose employees work with or around hazardous chemicals ensure that they review the updated SDSs and assess each of the employer's underlying compliance programs that may be impacted by the SDSs.
- Employers ensure that employees who work with or around hazardous chemicals are trained to recognize the pictograms and hazard warnings that will be required under the new Hazard Communication Standard. Employers must document this training and develop mechanisms to ensure employees understand how to work with or around hazardous chemicals. **R**

## Ottone Patriarch Dies

Louis John Ottone, former president of Salinas Tallow Co. LLC, passed away May 16, 2015, at the age of 93. Born to Italian immigrants, he joined his father and uncle early on in the family rendering business in Salinas, California. Ottone became president of Salinas Tallow in 1959 and continued to work until he retired in 2000 at the age of 79. He was very active in the rendering industry, serving on the National Renderers Association Board of Directors and as president of the Pacific Coast Renderers Association. Ottone was also an avid dancer, snow skier until the age of 87, and runner, participating in the 1984 Los Angeles Summer Olympics torch relay, carrying the torch for a kilometer just outside of Salinas.

Ottone was preceded in death by his wife of 61 years, Jo, and brother John. He is survived by six children, 15 grandchildren, 10 great-grandchildren, a brother, and two sisters. Donations in his memory may be made to a favorite charity.

## EQUIPMENT/SERVICES

**FOR SALE** - Westfalia Desludger Centrifuge-Clarifier with self-cleaning bowl. SA-60-06-177.

Have manuals and all tools for the machine. Stainless construction, 40 hp, main drive motor. All electric switchgear H-beam mounted.

Rebuilt, but used very little. \$60,000.

**WANTED** - Used Anco 10" 202-6 crax press or any parts for 202-6.

Contact Bud at (704) 485-4700 or e-mail [erco@ctc.net](mailto:erco@ctc.net)

### Used and Rental Boilers

Used for Sale to 75,000 PPH

Rental Boilers to 70,000 PPH

Complete Retube Service Nationwide

See [www.McCainEngineering.com](http://www.McCainEngineering.com)

Sales@McCainEngineering.com

Toll Free (888) 662-0123

### WW Sludge / Brown Grease?

Patents to process wastewater sludge or DAF grease into value-added non-oily dry products.

[www.rigeltechcorp.com/daf](http://www.rigeltechcorp.com/daf)

## Advertisers

Ameri-Pac .....	27
Anco-Eaglin Inc. ....	7
Artex Mfg. ....	31
Animal Protein Producers Industry .....	17
Baker Commodities Inc. ....	Back cover
Centrifuge Chicago Corporation .....	35
Conestoga-Rovers & Associates .....	5
CST Industries Inc. ....	29
Dupps .....	9/Inside back cover
GEA Group .....	19
Haarslev Inc. ....	1/15
Industrial Steam .....	5
Institute for Infectious Animal Diseases .....	36
Kemin Industries Inc. ....	2
Lock America Inc. ....	30
Novus International Inc. ....	25
Onken Inc. ....	3
Orthman Conveying Systems .....	36
Par-Kan Company .....	37
Sturtevant Inc. ....	Inside front cover
Summit Trailer Sales Inc. ....	21
Travis Body and Trailer Inc. ....	23
Walinga Engineered Transportation Equipment .....	14
Worcester Industrial Products Corp. ....	35

# RENDERING IS RECYCLING

## RENDERING IS SAFE & ESSENTIAL

- Protects human health
- Sustainable and contributes to sustainability of animal agriculture
- Protects the environment
- Essential link in food chain



## RENDERING IS *Green!*

Rendering is: the process of breaking down animal by-products into fats & proteins



Rendering reduces greenhouse gases. Carbon dioxide, methane, and other greenhouse gas emissions from natural decomposition like in a compost pile or landfill are avoided.

1.2 metric tons



One decomposing dairy cow releases 1.2 METRIC TONS of carbon dioxide.

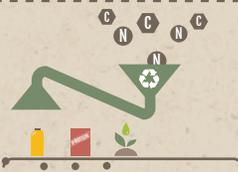


Rendering these animal tissues has the same effect on greenhouse gas emissions as removing 12,263,316 CARS FROM THE ROAD

## RENDERING IS RECYCLING!

Carbon- and nitrogen-rich materials are recycled into

## USEABLE PRODUCTS



Rendered products are ingredients in:



Plus Other products like soaps, lubricants & detergents



*"We're committed to the customer,  
every hour of every day."*

**Larry Tully, Field Service Manager, (far left)  
and the Field Service Team.**

## **Dupps Field Service**

**The Dupps family includes all the dedicated and hard working employees whose efforts, loyalty and pride have made our company the best in the business. Compare our level of knowledge, experience and service—we're sure you'll agree that Dupps is your best choice.**



"For us, the bottom line is to be there when our customers need us. They operate Dupps equipment because it offers top performance and reliability; and it's our job to keep it that way . . . any time, day or night.

"Every minute of downtime costs money, so it's our policy to have a service representative ready to work at a customer's plant in 24 hours or less. That's why we maintain the largest service department in the business, with the right tools and parts to do the job.

"Every representative knows Dupps equipment inside and out, so we do the job right as well as quickly. Experience pays off in other ways too — we can help make sure equipment is properly maintained so it operates at peak performance, and to avoid expensive repairs down the road.

"Our motto is 'Dupps won't let you down'; for our team that means we're committed to the customer, every hour of every day."

**Explore Dupps  
systems, service & support**  
**www.dupps.com • (937) 855-6555**



The Dupps Company • Germantown, Ohio • U.S.A.



**Baker Commodities.**  
**Sustainable and one step ahead**  
**since 1937.**



**Baker Commodities Inc.**  
 Recycling for Life  
[www.bakercommodities.com](http://www.bakercommodities.com)