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The International Magazine of Rendering

October 2015

The Birthing of a Giant Rule



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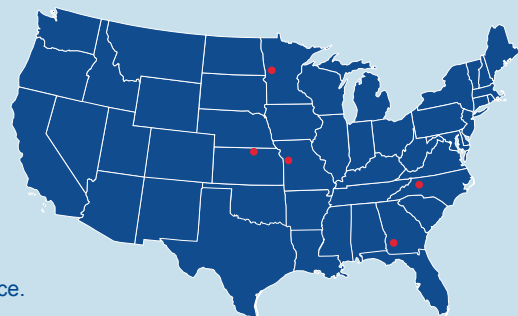
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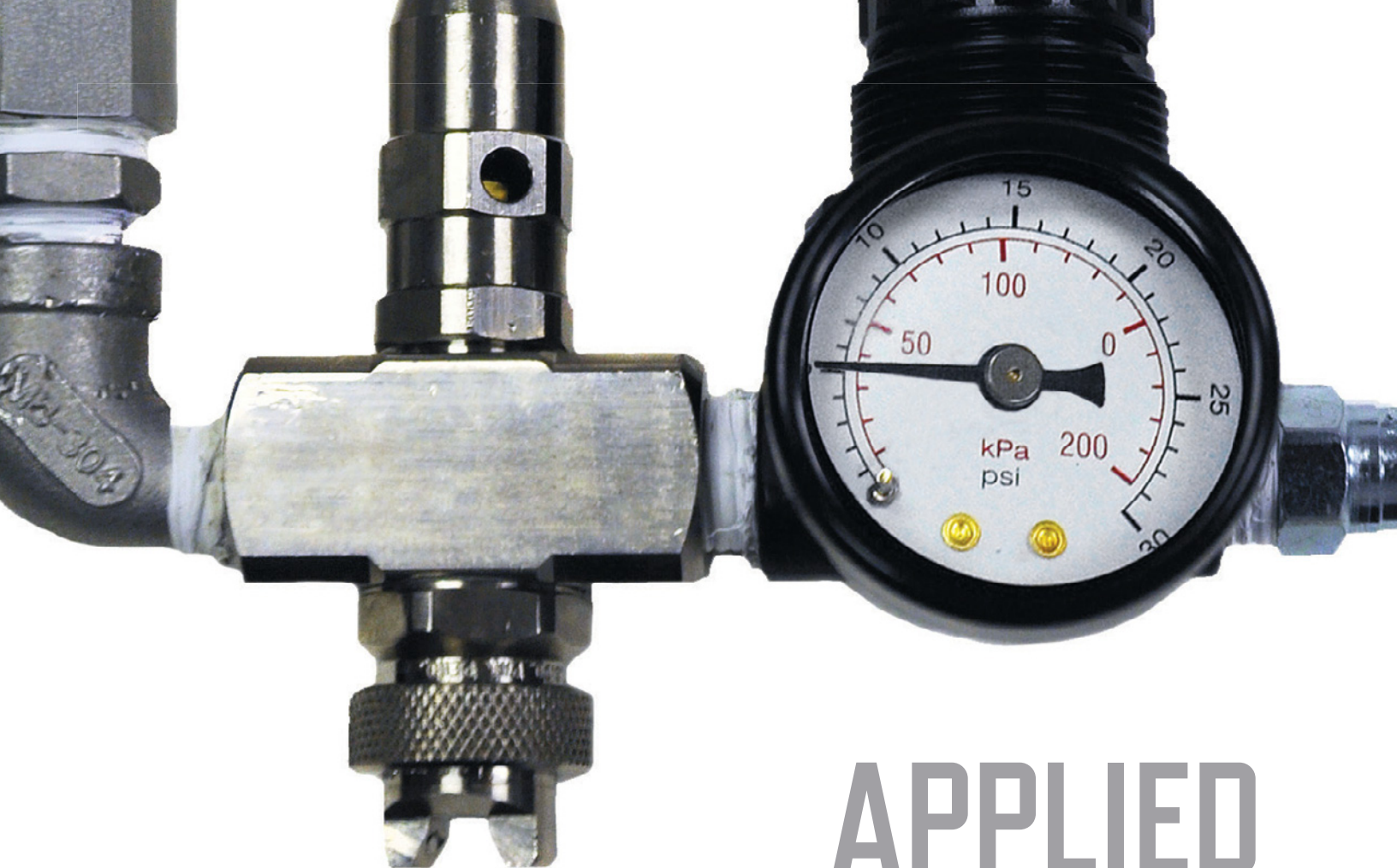
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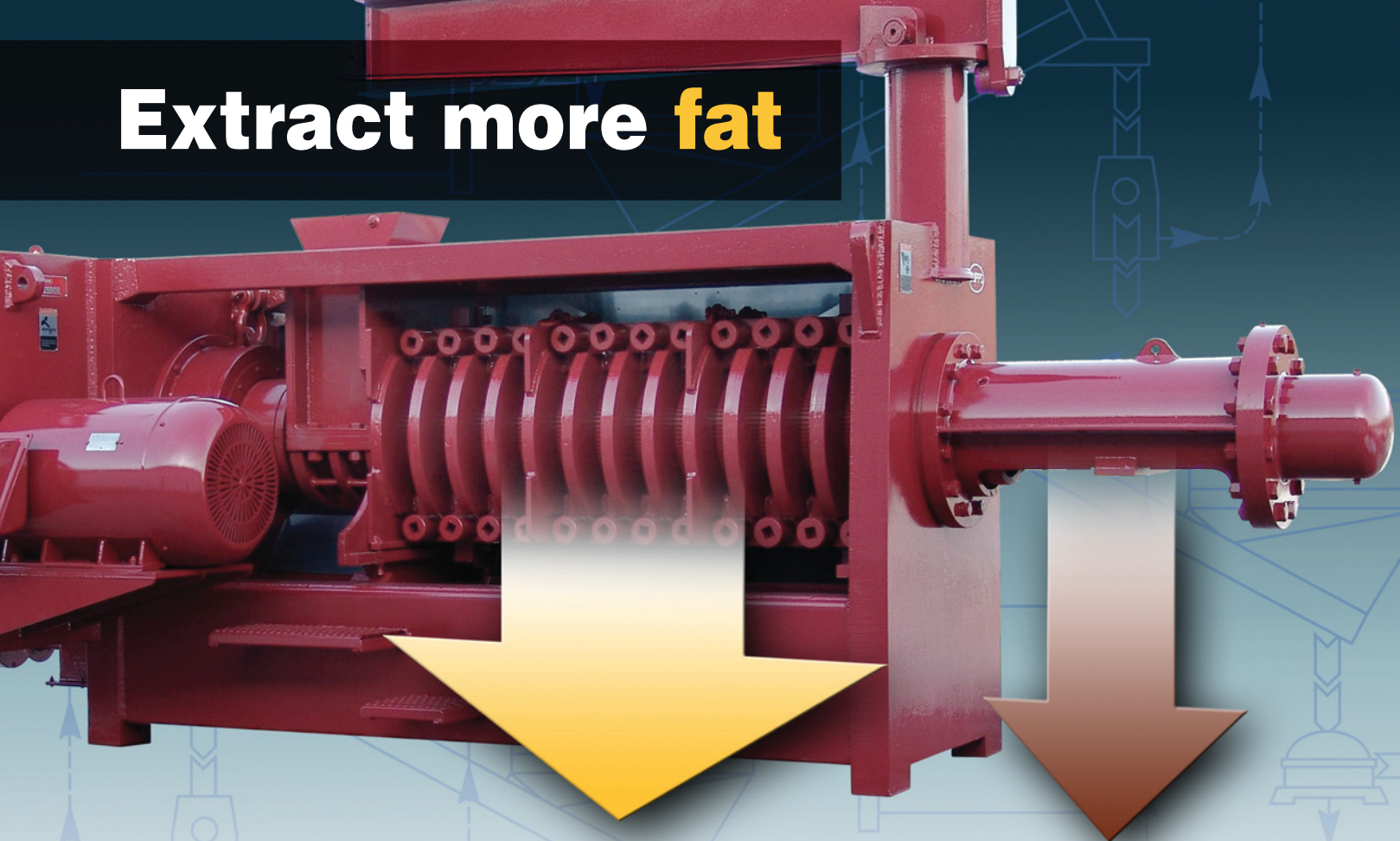


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On the Cover

The long-awaited Food Safety Modernization Act food for animals rule is finally released.

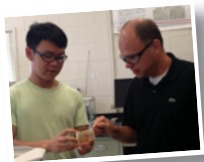
pg. 10

Features

- 10 The Birthing of a Giant Rule**
The Food Safety Modernization Act is now final.
- 12 Tallow has Considerable Value**
In aquaculture feeds.
- 14 Sponsors, Exhibitors Key Ingredients**
Of industry convention.
- 21 Researchers Awarded**
For benefiting renderers.

Departments

- 6 View from Washington**
Federal spending quandaries.
- 8 Newsline**
Waters of the US rule challenged.
- 22 From the Association**
Top Washington hurdles for renderers.
- 24 Biofuels Bulletin**
More jail time for biodiesel fraudsters.
- 26 International Report**
Rendering sustainability – an alternate view.
- 27 Mark Your Calendar**



- 28 ACREC Solutions**
Low-energy process for concentrating stick water.

- 30 Labor and the Law**
Workplace violence.
- 32 Tech Topics**
Understanding the complex energy marketplace.
- 34 People, Places, and...**
- 36 Classifieds**

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There's trouble brewing in Southern California. The South Coast Air Quality Management District (SCAQMD) is the air pollution control agency for all of Orange County and the urban portions of Los Angeles, Riverside, and San Bernardino counties, some of the smoggiest regions in the United States. The district claims on its website that it is "committed to protecting the health of residents, while remaining sensitive to businesses." Well, if Proposed Rule (PR) 415 is any indication, the last statement does not apply to rendering companies.

Introduced in early 2014, PR 415 is designed to reduce odors from facilities conducting inedible rendering operations. It is the result of an issue identified by the Working Group for the Clean Communities Plan in the pilot study area of Boyle Heights, a community near the city of Vernon's rendering facilities. The proposed rule includes implementation of best management practices, enclosures for process areas that have high potential for odors, closed system requirements, as well as other measures to control odors from rendering operations.

No one denies that rendering operations can produce offensive odors, but the City of Vernon is a 5.2-square-mile industry hub boasting a variety of smells from manufacturers such as plastic, steel, apparel, and food. Targeting just rendering is illogical and detrimental to these sustainable and beneficial companies. One renderer stated that compliance costs under this proposed regulation would prohibit them from continuing to operate in the Los Angeles area. There are five renderers in and around Vernon, but this proposed regulation could have broader-reaching implications for the rendering industry within California and throughout the United States.

Affected renderers have been diligently lobbying at SCAQMD and the state capital and feel they are making progress. Yet SCAQMD remains determined to push the proposal through with more hearings scheduled this fall. It is time once again to keep up the good fight against this unfair and business-insensitive PR 415. **R**



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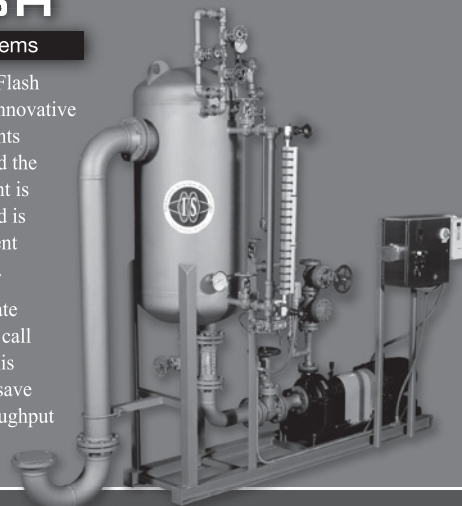
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Federal Spending Quandaries

Autumn 2015 will be very noisy in Washington, DC. On Capitol Hill, the ruckus will emanate from debates over budgets, spending, debt ceiling, taxes, and other economic ephemera. On the web, television, smartphones, radios, and in the newspapers, the racket will be the campaigning of 15 Republicans and seven Democrats – so far – chasing their respective party's presidential nomination. At times, all of these partisan noisemakers will be yelling simultaneously.

By January 2016, a smaller candidate pool will emerge. The Republican "outsider" advantage – think Donald Trump, Carly Fiorina, and Dr. Ben Carson – will be less of a factor while several well-known political names will drop out given they cannot light the fire necessary to draw big money donors. Issues unrelated to a presidential run and apparently unmanageable by the folks targeted will take out other candidates. The speculation over whether Mitt Romney will enter the race to provide GOP adult supervision will continue until he acts to end the vocalized hopes and/or fears.

February and the first week of March 2016 will shake out the respective fields dramatically as the Iowa caucuses are set for February 1, the New Hampshire primary is February 9, and Super Tuesday – 12 state primaries – is March 1. Nearly all other state primaries will be held between Super Tuesday and the end of June.

The Republican National Convention will be held July 18-21, 2016, in Cleveland, Ohio, while the Democrats convene in Philadelphia, Pennsylvania, July 25-28, 2016. Both conventions could defy the lackluster performance of the last several party gatherings and open with no clear nominee. Americans would then be treated to the first open conventions in decades. When that dust settles, we will then witness the steady drone of party platforms and name calling right up until November 8, 2016, when the 58th quadrennial national election is held.

For Congress, there are 45 or so scheduled work days between their return from August recess in September and their scheduled adjournment on December 18. All but a few non-money bills will be deferred into 2016 as everything is now viewed through the prism of presidential politics. At stake for Democrats is four more years in the White House and retaking at least one chamber in Congress; for the GOP, it is retaining control of Congress and retaking the White House.

Cynics say Congress will take as little substantive action as possible to avoid riling voters. Among non-budget issues dominating both chambers is funding a multi-year reauthorization of federal highway, bridge, and urban commuter system programs. This translates to finding a way to replenish the near-bankrupt highway trust fund without raising the federal gasoline tax or dipping into the treasury in a classic robbing-Peter-to-pay-Paul scenario.

Also on the agenda is the sure-to-be-ugly vote on the Iran nuclear agreement, wrestling with repeal of country-of-origin labeling, and the beginning of a slow dance around House Ways and Means Committee Chairman Paul Ryan's (R-WI)

dream of a corporate tax reform package. Up too is House action to extend expired federal tax credits for two years – retroactive to January 2015 – and possibly convert the current biodiesel/renewable diesel blenders' tax credit into a producer credit. Federal preemption of state and local laws requiring the labeling of foods containing genetically modified ingredients is also slated for October consideration in the Senate now that the House has passed its bill. In addition, should Japan and/or Canada finally cooperate in getting the final TransPacific Partnership trade pact, the clock starts ticking on 60 days of public examination of the agreement, culminating in an up-or-down congressional vote on the merits of the treaty.

The first fiscal challenge was the September struggle to keep the federal government open and operating (i.e., avoiding the dreaded "government shut down") come October 1, the beginning of the new federal fiscal year (FY). While the House had approved several of its dozen FY 2016 spending bills – although not for agriculture/the Food and Drug Administration – the Senate was gridlocked as Democrats, unhappy with too little spending, threatened to filibuster any spending bill brought to the floor. Further, several of the House and Senate spending bills carried policy "riders," language unrelated to spending tacked on in hopes the president will not veto that particular package. These add-ons seek to provide relief from a number of contentious and highly political issues, including immigration reform, blocking funding for Planned Parenthood, and stopping the Environmental Protection Agency's "waters of the US" rule. Similar action is being attempted on the agency's ozone rulemaking, its greenhouse gas/carbon capture rule on power plants, and its Renewable Fuel Standard authority.

President Barack Obama made it clear he does not support most of the GOP-driven spending bills based on their expenditure priorities and funding levels alone. This means Congress will resort to a "continuing resolution," which is simply a vote to extend current government spending past September. Then the debate shifts to how long this resolution will last. While a continuing resolution usually runs until the end of the calendar year, last year's FY 2015 omnibus spending package was finally approved just before Christmas. There is buzz about a one-year resolution tied to hopes for a successful budget/spending deal.

Federal spending should never be confused with the federal budget. Spending, or "appropriations" as lawmakers call it, goes to the discretionary or non-mandatory spending side of the ledger. The amounts are set by law for each department and agency. The budget agreement is just that, an agreement among lawmakers as to how much overall the federal government should spend. If an agreement is actually reached, it is enshrined in a "budget resolution," which carries no force of law and is nonbinding on Congress.

However, the current budget and spending process is encumbered by "sequestration," a Gordian knot of arbitrary spending limits imposed by the 2011 Budget Control Act.

Effectively, this deal – originally designed to be temporary – sets hard caps for each of the 12 spending bills. As might be expected, both sides of the political aisle want sequestration to disappear as much as they want more money to spend but, as usual, they equally disagree on how to make that magic happen.

When it comes to spending caps, the notion of limiting how much the government spends on defense makes everyone nervous. However, the 2011 budget act does not treat defense spending any differently than domestic program discretionary spending on food safety, and getting rid of the defense caps is driving this train. One proposal being floated as Congress leaders prepared to go into negotiations with the White House in early September was a move to raise both defense and domestic spending caps for one year – defense by \$38 billion, domestic to be hammered out with the Obama administration. These are tied to a pledge to return to the sequestration spending caps in the 2020s, using those future “savings” to pay for the increased spending now.

To get to this elegant “fix,” lawmakers will have to negotiate a political minefield going into the hard home stretch run for the White House in 2016. Senate Majority Leader Mitch McConnell (R-KY) pledged in early September there will be no federal government shut down October 1 because Republicans are not going to take the blame for furloughing tens of thousands of federal workers going into an election year. He hopes to negotiate a budget deal that makes everyone a little bit unhappy (i.e., a successful compromise on spending priorities). McConnell has been candid in saying 46 Senate Democrat votes are enough to keep the chamber from getting 67 votes – the total needed for a bill to be deemed “veto proof” – but stated he is willing to “try and sort out how much we’re going to spend and where we’re going to spend it.”

Once the government is funded for however long, Congress will confront the debt ceiling, that legal limit for federal borrowing, similar to the limit on a credit card. Right now, that limit is about \$18 trillion but only because last year, through budget gamesmanship, Congress dodged a formal increase vote. Whether that formal vote will be

taken this year is unknown, but at least Congress has an out if the political heat gets too high.

This fall’s 45-day session will be busy, at least for speech writers and those who craft the clever remarks members of Congress utter during legislative business and on the campaign trail. How much substantive progress is made on the fiscal and non-fiscal slate of issues remains to be seen but, suffice it to say, for the first time in several months, members of Congress will be earning their \$173,000 annual salaries. **R**

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Waters of the US Rule Challenged

On August 27, 2015, a federal judge granted a preliminary injunction preventing the United States (US) Environmental Protection Agency (EPA) from implementing its Clean Water Rule. Granted in a case in the US District Court for North Dakota, the injunction blocks the rule from taking effect in 13 states: Alaska, Arizona, Arkansas, Colorado, Idaho, Missouri, Montana, Nebraska, Nevada, New Mexico, North Dakota, South Dakota, and Wyoming. In granting the injunction, Chief Judge Ralph R. Ericson stated, "[o]nce the rule takes effect, the states will lose their sovereignty over intrastate waters that will then be subject to the scope of the Clean Water Act."

EPA, in conjunction with the US Army Corps of Engineers, published the final rule on May 27, 2015, revising the definition of "waters of the US," greatly expanding EPA's jurisdiction over activities in wetlands, intermittent streams, drainage ditches, and upland areas. The rule was supposed to clarify the scope of federal jurisdiction over upland and isolated waterways, but is widely viewed as a huge power grab by EPA. The rulemaking was vehemently opposed by agricultural groups. The American Farm Bureau Federation has said that the final rule is even broader and more ambiguous than the one originally proposed in 2014.

The rule has been challenged by over 30 states as well as groups such as the National Association of Manufacturers and American Farm Bureau Federation in lawsuits filed in various federal courts. These suits generally argue that the new rule goes beyond the authority granted by Congress. It is expected that the plaintiffs in the other pending cases will seek to have the injunction applied nationwide.

EPA immediately announced that the rule will continue to take effect as scheduled on August 28, 2015, in all other states. EPA is expected to roll out components of the rule gradually and publish a guidance document on compliance. Meanwhile, EPA has asked that all of the suits challenging the rule be consolidated into a single case before the US Court of Appeals in Washington, DC, a forum generally considered to be deferential to administrative agencies.

The House of Representatives passed a bill requiring EPA to withdraw the rule. A similar bill is pending in the Senate.

R

Largest US Fish Farm Planned for California Shores

San Diego, California, may soon become home to the United States' largest fish farm. The environmentally sustainable aquaculture project is slated to produce 5,000 metric tons (MT) of fish per year and is the first farm of this scale to be built in federal waters of the United States.

With a vision of feeding future generations in harmony with the ocean, the Rose Canyon Fisheries aquaculture project is a partnership between Hubbs-SeaWorld Research Institute (HSWRI) and Cuna del Mar, a private equity fund dedicated to developing sustainable aquaculture. The project will be built four and a half miles off San Diego's shoreline and, when fully operational, produce 5,000 MT annually of yellowtail jack, white seabass, and striped bass. Yellowtail jack was chosen as the initial species as cultured juveniles are readily available from HSWRI hatcheries.

Production will be phased in, beginning at 1,000 to 1,500 MT in the first production cycle in order to achieve operational efficiency and ensure environmental compatibility. The project will gradually expand to 5,000 MT annual production within eight years. In total, there will be 48 submersible cages, each around 11,000 cubic meters. The site will be permitted for other locally available species that are interchangeable with yellowtail jack, depending on availability and permit conditions.

The project is driven by growing global demand for healthful seafood and insufficient domestic production. In the United States, more than 91 percent of seafood is imported and half of that supply comes from aquaculture. This represents a \$10.4 billion contribution to the nation's trade deficit.

According to HSWRI president and chief executive officer Don Kent said the farm will not hurt the environment and thick rope lines and plastic nets will prevent marine mammals from becoming entangled.

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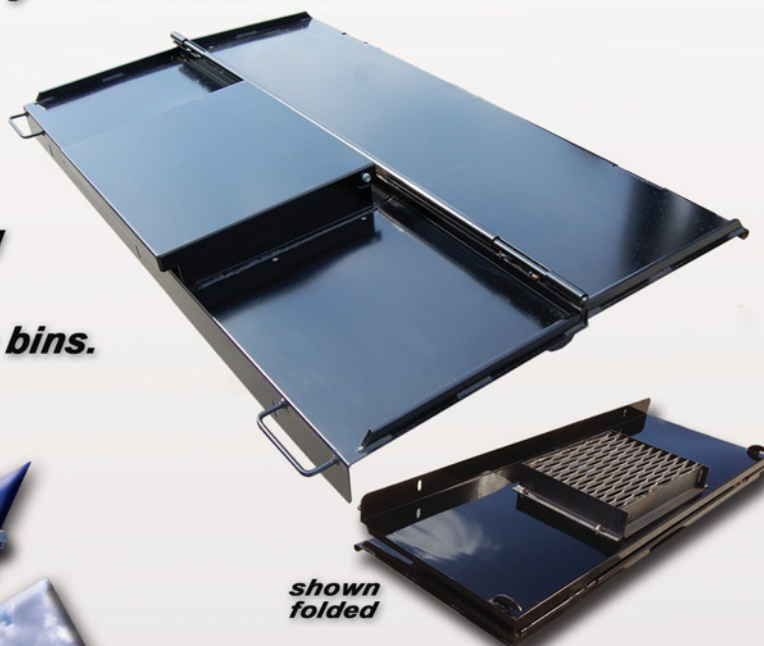


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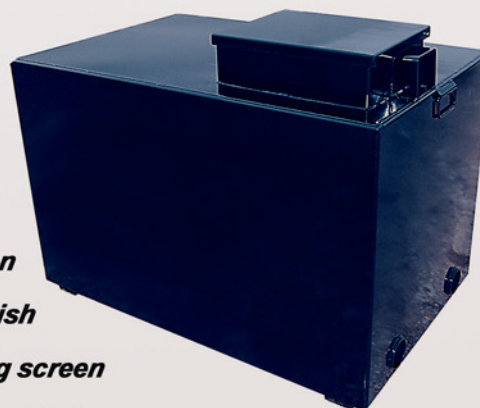


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The Birthing of a Giant Rule



By David L. Meeker, PhD, MBA
Senior Vice President, Scientific Services
National Renderers Association

development of this rule. NRA has been intimately involved in technical responses to FDA proposals and also assisted the agency in developing training programs and guidance for inspectors and industry.

Many believe that FSMA, passed by Congress in 2010 and signed into law on January 4, 2011, was pushed through because of the “great melamine pet food recall of 2007.” It is more likely that FSMA was written because of several highly publicized human food contaminations and recalls, but animal feed was certainly included in the human food law because of the melamine contamination.

The rule implementing the main part of the Food Safety Modernization Act (FSMA) law affecting renderers, titled “Current Good Manufacturing Practice, Hazard Analysis, and Risk-Based Preventive Controls for Food for Animals,” is now final and compliance dates for some operations will begin in September 2016. The National Renderers Association (NRA) will analyze this rule in detail and provide information to its members to ensure compliance while it also works with the Food and Drug Administration (FDA) on developing guidance and learns more about how details will be interpreted by the agency.

In the weeks following the deadline for this article, NRA will be working with animal feed and pet food allies to determine how FDA intends to move forward on each FSMA requirement. NRA will discuss concerns and questions with FDA and communicate back to its members. The NRA Feed Regulation Committee has been engaged throughout the development of the association’s positions and responses to FDA proposals. NRA plans to present a detailed report on this final rule at the committee meeting during its convention on October 21, 2015.

Note that FDA’s regulation refers to “animal food,” which indicates it applies to pet food as well as livestock feed. The rendering industry has traditionally used the term “feed” when referring to diets for livestock and poultry, but will use the term animal food throughout this article since it is about FDA’s regulation. NRA will not attempt to change the traditional usage of the word feed in most other venues.

Background

The new law includes the most significant changes to food safety laws in over 70 years. FSMA authorizes FDA to promulgate new rules for preventive controls, develop performance standards, and create new administrative detention rules. FSMA also provides FDA authority for mandatory recall of adulterated products and the hiring of more than 4,000 new inspectors. NRA commends the agency for engaging industry in a transparent and collaborative process throughout the

Impact on Rendering

The rendering industry is bound to have an easier transition to this new era of FSMA regulation than other feed industry sectors because of responsible responses to past challenges. *Salmonella* education and testing programs dating back over 30 years and high compliance to bovine spongiform encephalopathy feed regulations put in place over 10 years ago give renderers a solid foundation to smoothly comply with this new regulation. Many of the thousands of feed mills and ingredient manufacturers now covered by the new rule have never experienced an FDA inspection and will have to learn many procedures renderers have already implemented. To our colleagues in some of these other animal feed sectors, welcome to our world!

Early Analysis of the Final Rule

Early analysis of the final rule shows no big surprises. The good news is that FDA listened to most of the industry’s important comments. The animal feed manufacturing industry asked for a phased compliance schedule, allowing for an extra year to develop preventive controls. This was granted, although the extra year is not much of a benefit to renderers who are already in the habit of implementing good manufacturing practices (GMPs) and process controls (namely cooking) as part of the *North American Rendering Industry Code of Practice*. In the final rule, NRA received a key positive response to its comments on the proposed rule—environmental and product testing will not be required carte blanche, but only when appropriate (such as for pet food).

NRA was also successful in getting a provision removed that would have required pathogen testing in raw materials, something that obviously made no sense in rendering since raw materials are destined for thorough cooking. NRA joined many other industries to oppose requirements for facilities to send records and food safety plans to FDA. We were successful here since FDA will now only review records when

on-site in the course of an authorized inspection and will have the right to copy records as necessary and appropriate as in an animal food recall investigation. FDA had proposed that electronic records must be kept in accordance with 21 *Code of Federal Regulations* Part 11, but NRA and others had commented that this requirement would be burdensome and costly while unnecessary to achieve FSMA goals. FDA changed the final regulation to require only that “facilities should take appropriate measures to ensure that records are trustworthy, reliable, and generally equivalent to paper records and handwritten signatures executed on paper,” rather than requiring adherence to Part 11.

FDA received more than 2,400 comments on the proposed FSMA rule and the final rule shows the rendering industry fared well in the agency’s responses to comments. Some commenters called for more rigid restrictions on raw materials, more required environmental and product testing, less flexibility in compliance, and many other impractical requirements that would have hindered commerce. It is a testament to NRA’s cooperative relationship with FDA and the credibility of its technical comments to them that these anti-business interests did not have more impact on the final regulations.

Rather than prematurely comment on all the details that were included in the final rule before each section is carefully analyzed, this article will provide some historical perspective and examine the “big picture” impacts of the regulation.

Historical Perspective

It is a natural American political response to a crisis – such as hundreds of dogs and cats dying unexpectedly from the melamine contamination – to pass a law to prevent it from happening again. The fear of the unknown led to pressure to legislate and regulate. The FSMA law and associated regulations are well-intentioned, developed in collaboration with industry, and will be reasonable for renderers to comply with. They will also foster an overall manufacturing environment that will prevent most hazards. Yet, there is no way to know or predict all hazards. Industry will prevent, mitigate, and reverse all known and foreseeable hazards as required by FSMA, but the public is likely to be disappointed when something unknowable or unforeseen happens in animal food so more legislative action can be expected in the future if a new hazard arises from an unexpected source.

In the real world, ahead of Congress and public pressure, industry and regulators have been collaborating a long time on the very concepts now required by the new FSMA law. In 2003, FDA introduced the Animal Feed Safety System (AFSS) to address the safety of all animal food at all stages of production and use, filling in gaps of regulation and encouraging industry to be proactive. NRA was involved back then assisting FDA to develop proposed rules for process controls for animal food ingredients that would be practical for industry and effective for food safety goals. This process was underway when FSMA came along, but AFSS provided the foundation for the new regulation. In addition, the Association of American Feed Control Officials (AAFCO) adopted model GMPs for feed and feed ingredients in 2009 after a long incubation period (NRA helped develop these GMPs that had already been implemented in many states). NRA was also involved in a European-based effort, the British Standards Institute’s

Publicly Available Specification (PAS) 222 – *Certification for Animal Feed Manufacturing*, that was and remains consistent with the rendering *Code of Practice* and FSMA.

The *Code of Practice* was formally adopted by NRA in 2004 and the first rendering plants were certified in 2005. All of the related background work with FDA, AAFCO, PAS 222, and the American Feed Industry Association’s Safe Feed/Safe Food audit program have informed and improved the *Code of Practice* over the past 11 years. Since January 2015, rendering plants can certify in both the Safe Feed/Safe Food and rendering *Code of Practice* with a single third-party audit aimed principally at the necessary components to comply with FSMA. The rendering industry has reasons for optimism:

- Renderers have a long-standing commitment to address animal feed safety.
- Renderers have worked closely with regulators and other industries for many years.
- Renderers are well prepared to comply with new FSMA regulations.
- Participation in the rendering *Code of Practice* will ensure compliance and provide the structure to meet the new FSMA rule requirements.

The Birth of FSMA Regulation Timeline

- Melamine in pet food (2007), *Salmonella* in peanut butter (2009)
- Consumer awareness and concern ebbs and flows
- Pressure to legislate on politicians and bureaucrats from activists and the public
- Legislation passed (2010), NRA comments to FDA
- FDA proposes its animal food safety rule (2013), NRA comments to FDA
- FDA re-proposes its animal food safety rule (2014), NRA comments to FDA
- FDA finalizes its animal food safety rule (2015), NRA and other industries assist FDA in practical interpretation and inspector training

FSMA’s Big Questions for Renderers

- Do you have an animal food safety plan for your operation?
- Are your employees trained to do their job and do they understand the importance of hygiene for animal food safety?
- What are the animal food safety hazards in your plant?
- Which of these hazards require a preventive control?
- What is your process to control these “significant” hazards?
- How do you know this process is effective (validation)?
- Do you make corrections in your process when needed?
- How do you know your process was properly completed (verification)?
- Where is your documentation for all of this (records)?
- Do you implement current GMPs throughout your plant?
- Do you have a recall plan in case something goes wrong?

Continued on page 21

Tallow has Considerable Value in Aquaculture Feeds

By Drs. Jesse Trushenski, Michael Schwarz, and Giovanni Turchini

Editor's note - Jesse Trushenski, PhD, is with the Center for Fisheries, Aquaculture, and Aquatic Sciences at Southern Illinois University in Carbondale, Illinois. Michael Schwarz, PhD, is with the Virginia Seafood Agricultural Research and Extension Center at Virginia Tech in Hampton, Virginia, and Giovanni Turchini, PhD, is at Deakin University in Warrnambool, Victoria, Australia.

Aquaculture's demand for marine-derived feedstuffs continues to increase despite record-high prices for fish meals and oils. The Food and Agriculture Organization (FAO) has indicated that for many aquaculture species, replacing or sparing fish oil may prove a more significant challenge than finding alternatives to fish meal. FAO noted that while alternative sources of essential amino acids abound, there are few alternative sources of the essential fatty acids found in marine-derived ingredients. Furthermore, fish meal sparing typically exacerbates the fish oil "bottleneck" by increasing the need for fish oil as a dietary source of long-chain polyunsaturated fatty acids (LC-PUFA) required by many fish species.

The issues of least-cost feed formulation and providing adequate levels of LC-PUFA are further complicated by incomplete knowledge of the LC-PUFA requirements of many fish.

Quantitative essential fatty acid requirements are lacking for many commonly cultured fish and none of the studies conducted to date have taken the interactive effects of overall dietary profile into account. Data generated by Dr. Jesse Trushenski's laboratory at Southern Illinois University and others suggest that saturated fatty acids (SFA) and monounsaturated fatty acid (MUFA)-rich alternative lipids, including animal fats, can make utilization of available LC-PUFA more efficient. The above researchers hypothesized that using SFA- and MUFA-rich beef tallow as the primary alternative to fish oil may effectively

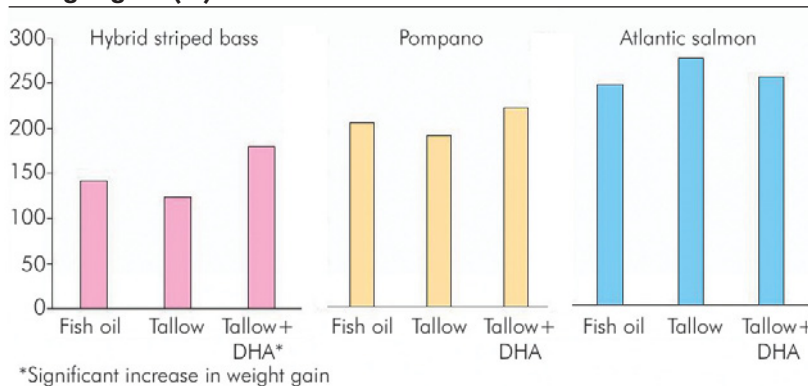
reduce minimum LC-PUFA requirements and allow for greater fish oil sparing in aquaculture feeds. In a series of studies conducted at Southern Illinois University, Virginia Tech, and Deakin University, researchers tested this hypothesis in hybrid striped bass (*Morone chrysops* × *M. saxatilis*), Florida pompano (*Trachinotus carolinus*), and Atlantic salmon (*Salmo salar*).

The researchers evaluated growth performance and tissue fatty acid profiles of juvenile fish fed diets containing menhaden fish oil, tallow, or tallow amended with purified sources of eicosapentaenoic acid (EPA) and/or docosahexaenoic acid (DHA) to achieve levels corresponding to 50 or 100 percent of those observed in the fish oil feed (tallow + 50 percent EPA, tallow + 100 percent EPA, tallow + 50 percent DHA, tallow + 100 percent DHA, tallow + 50 percent both EPA and DHA, and tallow + 100 percent both EPA and DHA).

Diets were randomly assigned to replicate tanks of fish and fish were fed assigned diets for a period of 8 to 14 weeks. With respect to hybrid striped bass, survival (98-100 percent) was equivalent among diets, but weight gain (117-180 percent), specific growth rate (1.1-1.5 percent body weight per day [bw/d]), feed intake (1.4-1.8 percent bw/d), and feed conversion ratio (FCR) (1.1-1.4, dry matter basis) varied. Except for FCR, no differences were observed between the fish oil and tallow diets but performance was generally superior among hybrid striped bass fed the tallow + 100 percent DHA, tallow + 50 percent both EPA and DHA, and tallow + 100 percent both EPA and DHA diets. Regarding pompano, production performance was largely unaffected by dietary lipid source and fatty acid composition. Weight gain (183-223 percent), specific growth rate (1.85-2.09

percent bw/d), feed intake (3.37-3.71 percent bw/d), and FCR (1.60-1.85, dry matter basis) varied slightly among diets, but not significantly. Pompano fed the tallow-only feed exhibited similar performance as those fed the fish oil-only feed. Supplementing

Weight gain (%) of fish fed fish oil or tallow-based feeds



tallow-based diets with DHA alone had a greater effect on pompano growth than supplementing in combination with EPA or with EPA alone.

With respect to Atlantic salmon, survival (99-100 percent) was also equivalent among diets with weight gain generally consistent (averaging 250 percent), apart from the tallow-only diet outperforming tallow + 50 percent EPA and 100 percent both EPA and DHA diets. Despite this difference in weight gain, no differences in specific growth rate (about 1.3 percent bw/d) were observed among the diets.

Feed intake was highest among Atlantic salmon fed the tallow-only diet and lowest among those fed the tallow + 100 percent both EPA and DHA diet, though the magnitude of the differences was relatively small (all about one percent bw/d). Feed conversion ratio was lowest among Atlantic salmon fed the fish-oil only diet but equivalent among all other diets (0.9-1.0). In all taxa, tissue fatty acid composition was significantly distorted in favor of SFAs and MUFAs among fish fed the tallow-based diets. However, changes in fatty acid profiles were generally less distinct than those typically induced by 18-carbon polyunsaturated fatty acid-rich plant oils.

Although these results are somewhat surprising, it is encouraging that virtually the same response was observed in each trial. The lack of difference between the positive and negative controls is somewhat unusual but consistent with previously observed results with a SFA-rich, hydrogenated soybean oil fed to white seabass and tallow fed to rainbow trout.

The researchers anticipated that using SFA-rich tallow would effectively “reduce” the essential fatty acid requirements of hybrid striped bass, pompano, and Atlantic salmon. What was not anticipated is that the requirements were reduced to the point of being adequately met by residual lipid present in the fish meal included in each feed formulation. Although readers are cautioned to take the short-term nature of these feeding trials and the number of taxa tested into consideration when attempting to extrapolate the results generated, these results indicate tallow has considerable value as an ingredient in aquaculture feeds. **R**



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Sponsors, Exhibitors Key Ingredients of Industry Convention



Members of the National Renderers Association (NRA) have gathered annually for over 80 years to discuss matters that affect how they do business, possible new markets, pending government regulations, and hear about the global industry. This year, NRA is holding its yearly convention in Laguna Niguel/Dana Point, California, October 19-23. Speakers will highlight animal protein sustainability, how to lead and leverage the links in a supply chain, what is ahead for the United States and global livestock industry, the new environment in pet food, and why renderers need to be strong communicators to defend their business.

NRA committees will also discuss business matters while the Fats and Proteins Research Foundation will conduct its

membership meeting and host an emerging issues seminar where researchers will focus on new discoveries benefiting the rendering industry.

Along with these important meetings is an opportunity for renderers to meet with industry suppliers to learn and discuss the latest technologies and services available. A big part of the NRA convention's success is due to companies who provide sponsorship and/or exhibit at a reception held one evening during the event. These companies were invited to provide a brief summary of their products and/or services for this issue of *Render*. The following is an alphabetical guide to this year's NRA convention sponsors and exhibitors who responded to the invitation by press time.

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www.alloyhardfacing.com

As a follow-up to an article in the June 2015 *Render* about raw material handling, Alloy Hardfacing & Engineering Co. Inc. reminds renderers to consider an often overlooked part of their process: the raw material bin. Proper raw material handling adds to the bottom line and Alloy has recently completed several raw material bin projects, each emphasizing reliability and space maximization. This work emphasizes Alloy's tradition of budget-conscious problem solving in the United States and abroad since 1952.



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www.americanproteins.com

American Proteins started more than 65 years ago as a small rendering plant in northeast Georgia in Forsyth County. At that time, the poultry industry was just getting started and the by-products from chicken processing plants had to be hauled away and burned. As a visionary, Leland Bagwell saw a need to help the industry and the environment and was determined to fill it. Because of his vision, American Proteins today recycles over four billion pounds of inedible poultry parts each year while using the most environmentally secure methods available.



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Brown Industrial will be celebrating 80 years in 2016. They are a leader in mobile aluminum, steel, and 409 stainless steel rendering equipment offering container grease, barrel grease, vacuum barrel, bucket, vacuum, combination units, dead stock, and rendering end dump units. They are continuously improving and expanding their product line, including a new 115,000-square-foot facility that has improved lead times dramatically.

Brown Industrial thanks the rendering industry for its many years of patronage and looks forward to many more.

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See Artex ad on page 33.

Flottweg Separation Technology Inc.

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www.flottweg.com



Flottweg is a global manufacturer of separation technology including centrifuges, decanters, belt presses, disc stack separators, and specialty items such as Flottweg Tricanter, Sedicanter, and Sorticanter technology. The company's machines are used in many different industries including biofuels, ethanol, water and wastewater, rendering, chemical, industrial, algae, and many others. Flottweg's North American headquarters is located in Independence, Kentucky, for stocking parts, service, and application expertise.

Continued on page 16

Frontline International Inc.

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www.frontlineii.com

Frontline International Inc., a leading provider of Smart Oil Management systems, is partnering with renderers to provide better waste oil containment and recycling solutions. With equipment in more than 26,000 locations around the world, Frontline serves over 250 clients, including most major chains. The company's waste oil options include fully automated, semi-automated, and manual systems.

See ad on page 25.



Genesis III Inc.

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www.g3hammers.com

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Gulf Coast Environmental Systems (GCES) provides odor abatement equipment for the rendering industry. The company developed the first successful regenerative thermal oxidizer (RTO) design for the rendering industry and has since improved the technology under harsh conditions. RTOs greatly reduce carbon dioxide and nitrogen oxide emissions while providing quick capital returns with energy savings when replacing older technologies to destroy non-condensable gases. GCES is a one-stop shop providing engineering, manufacturing, installation, commissioning, and ongoing support.



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www.hf-press-lipidtech.com

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International Feed's 20 years of experience as an exporter of animal protein meals makes them "experts" in the intricate export process. Their suppliers enjoy the benefits of participating in the export markets without payment risk and the additional overhead cost of in-house sales, documents, and a logistics staff. The company slogan says it all: "Hire the Experts to do your Exports: International Feed."



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www.jenkinscentrifuge.com

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See ad on page 2.

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vanessa.stewart@novusint.com



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See ad on page 20.

Continued on page 18



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Sanimax's 1,000 dedicated employees provide quality services to their customers in the agri-food industry across the continent. "Reclaiming, renewing, and returning" are what they do with pride every day for more than 75 years. Sanimax has always been actively involved with NRA and is proud to carry on this tradition. They congratulate Tim Guzek, the company's vice president of procurement and strategic accounts, as the incoming chairman of NRA.



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Travis built its first rendering trailers in the 1980s and is proud to be a supplier to more than a dozen NRA members. They thank the industry for its support.

See ad on page 17.



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www.universalmaintenanceinc.com

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www.validuservices.com

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**See ad on page 31.**

For a complete list of the sponsors and exhibitors for this year's NRA convention in Dana Point, California, October 19-23, 2015, visit <http://convention.nationalrenderers.org>.

The NRA wishes to thank all the sponsors and exhibitors who so generously contributed to the success of this year's convention. Their continual support of the industry is much appreciated.

NRA offers a special thank you for the continued support of the convention's exclusive sponsors:

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www.haarslev.com

Haarslev Industries is the market leader for rendering solutions and mechanical and thermal dewatering for the processing of animal by-products. Upgrading of products, energy savings, and environmental protection are important parameters for supplies from Haarslev, whether it is a single piece of equipment or a complete turn-key plant. With offices and manufacturing facilities around the globe, including North America, Haarslev Industries offers more than 100 years of experience in designing, manufacturing, installing, and servicing rendering equipment.

See ads on pages 1 and 29.**The Dupps Company**

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Reflecting its mission to provide "the tools to build a sustainable world," Dupps is a leader in the manufacture, engineering, and service of rendering systems and equipment. The company offers unsurpassed performance and durability in a proven line of cookers, dryers, screw presses, size reduction machinery, process controls, and material handling systems. The industry's largest and most experienced staff of full-time field service technicians is supported by a rapid-response parts department with a full inventory of maintenance and repair parts.

See ads on pages 3 and inside back cover.**Tyson Foods Inc.**

(479) 290-4000

www.tysonanimalnutritiongroup.com

In 1958, Tyson Foods began rendering chicken by-products as an extension of its chicken processing for grocery stores and restaurants. Today, the company markets its rendered ingredients as Tyson Animal Nutrition Group serving the agriculture, aquaculture, and pet food industries. With nine rendering facilities and two blend mills working to provide consistent nutritional quality and superior track and traceability, Tyson's 100 percent chicken-based meals and fats are an excellent ingredient choice for animal feeds.

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www.valleyproteins.com

Headquartered in Winchester, Virginia, Valley Proteins Inc. is one of the largest non-captive recyclers of animal and poultry by-products and waste cooking oils in North America. The business was founded in 1949 by Clyde A. Smith and is currently owned and operated by his two grandsons. The company operates in the mid-Atlantic, southeast, and southwest regions of the United States and exports fats and proteins worldwide. It is also one of the nation's largest processors of poultry by-products and is the market-leading servicer for the turkey industry.



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RENDERING IS RECYCLING



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10 BILLION

chickens and turkeys are processed each year in the US



APPROXIMATELY 50% of the animal is considered inedible by Americans and goes to renderers including: bones, fat, blood, feathers & some internal organs

Farms Some animals die on the farm from injury, old age, or other issues. These animals represent about 4.5% of rendered product



Grocery Stores generate

Super Foods

1.92 BILLION POUNDS

of scraps, fat, bone, expired meat & used cooking oil annually

Renderers collect

4.4 BILLION POUNDS of used cooking oil per year in the U.S. and Canada

WHAT ARE THE PRODUCTS OF RENDERING?

Renderers collect:

56 BILLION POUNDS

of raw materials every year in the U.S. and Canada



If all renderable product was sent to the landfill, all available landfill space would be used in

4 YEARS

Renderers recycle these materials into:

10 BILLION POUNDS of fat and oil products

9 BILLION POUNDS of protein products annually



National Renderers Association • 500 Montgomery St, Suite 310, Alexandria, VA 22314 • (703) 683-0155 • www.nationalrenderers.org

- Do your suppliers and customers understand which hazards (if any) they are responsible for?

Compliance Dates

Rendering operations with more than 500 full-time equivalent employees must have current GMPs in place by September 17, 2016, and preventive controls in place by September 17, 2017. For renderers with fewer than 500 full-time equivalent employees, current GMPs must be in place by September 17, 2017, and preventive controls will have to be in place by September 17, 2018. Renderers qualifying as “very small businesses,” averaging less than \$2.5 million in revenue per year, will have one additional year – current GMPs in place by September 17, 2018, and preventive controls in place by September 17, 2019. However, the paperwork to prove the small business exemption and the requirements still in effect for these exempt firms seem more complicated than simply complying with the FSMA rule. Something to remember about compliance dates is that if a plant supplies a large animal feed manufacturer or a large pet food manufacturer, these customers will have the earlier compliance dates and will likely require their suppliers to meet the same standards even if it is not yet required by law. This is yet another reason all renderers are encouraged to participate in the rendering *Code of Practice* by September 2016 if not already doing so.

What is NRA Doing to Help?

Most of what FSMA requires FDA inspectors to examine in the future are factors that must be analyzed, observed, and measured in a plant. While the rendering *Code of Practice* will guide renderers through most of this, one very important piece – data to validate the rendering cooking process – will

be provided by the Fats and Proteins Research Foundation. The foundation has funded several studies to collect data proving that cooking is effective at mitigating risks from microbiological hazards, providing very specific data on time and temperature required to kill pathogens in raw materials such as animal tissues, poultry offal, and rendered fats. These studies will lead to published scientific journal articles that can be referenced to show FDA that rendering cookers are an appropriate preventive control for microbiological hazards. Scientific publishing takes time, so NRA plans to publish a white paper summarizing and presenting this validation data for members to use so each plant does not have to do its own validation research.

Fundamental to a preventive system is FDA changing from the traditional inspection model where it tries to find something wrong to one focused on whether firms are implementing systems that effectively prevent food contamination. This is a fundamentally different approach to food safety inspection and compliance that is encouraging for industry, but also raises some skepticism about how quickly FDA can change its culture. However, the agency intends to give this change in culture a serious effort. FDA plans to deploy specialized investigators, backed up by technical experts, to assess the soundness and performance of a facility’s food safety system. Such a knowledgeable team should help minimize different interpretations between industry and inspectors. FDA emphasizes training for industry as essential for this transition whereas industry emphasizes training for inspectors. In spite of different opinions over who needs the most training emphasis, NRA is working together with FDA to produce a standardized training curriculum available to both industry and inspectors.

More information can be obtained on FDA’s FSMA website at www.fda.gov/Food/GuidanceRegulation/FSMA/. **R**

Researchers Awarded for Benefiting Renderers

Two researchers whose projects should help increase the value of rendered fats and proteins have been awarded the Fats and Proteins Research Foundation’s (FPRF’s) newly established Innovation Award.

Drs. Andrew Hurley, Clemson University, and Jesse Trushenski, Southern Illinois University, are the 2015 recipients of the FPRF Innovation Award, which recognizes outstanding research to improve rendering operations, product quality, and safety, or increase use of rendered products. The award was established in March by the FPRF Board of Directors and will be presented to the winners at the foundation’s annual meeting in October in Dana Point, California. Both Hurley and Trushenski will present their work at the FPRF Emerging Issues Forum following the meeting.

Hurley’s research led to the development of renderable barrel liners and gloves that are expected to improve quality and significantly increase the value of rendered products in North America. His unconventional but practical solution to the rendering challenge of nonbiodegradable liners and gloves is now in the market-development stage.

Trushenski’s research found that beef tallow has considerable value as an ingredient in aquafeeds compared

to traditional, plant-derived oils (see article on page 12). She discovered that tallow can supply bioavailable essential fatty acid requirements for various species of fish. Trushenski’s presentations on her project have generated interest in the aquaculture community about beef tallow as an aquafeed ingredient. Tallow use could enhance fish nutrition and greatly improve sustainability of fish production in this growing market.

“Dr. Hurley and Dr. Trushenski are deeply committed researchers who explored innovative opportunities for rendered products with promising results,” said FPRF Chairman Erika Weltzien. “Their dedication and outstanding academic leadership on two very different research projects deserves widespread recognition and praise from the rendering industry. We are honored to award them the highest recognition in rendering research.”

The FPRF Innovation Award will be presented annually to one or more foundation grant recipients who will also be invited to deliver presentations on their research. Considerations include creativity of the research, timeliness and quality of the work, the investigator’s ability to communicate results, and the potential impact on the rendering industry. **R**

Top Washington Hurdles for Renderers

Usually when Congress returns from its annual August recess, it is like the beginning of the year. Senators and representatives come back revitalized from taking time off and meeting with constituents. They have the pulse of their voters and are ready to act. The town comes alive again as people return from August vacation. However, it did not seem that way this year.

Everything picked up where it left off before Congress went home. Daily, election-year politics are stonewalling passage of legislation, and it is not even an election year. Hopefully, Congress and President Barack Obama's administration can agree on enough to get some real work done in the dwindling legislative days left before Congress adjourns by the end of the year. Some of that legislation is very important to the rendering industry.

Renderers have become more active in dealing with Congress in recent years. Bovine spongiform encephalopathy and biodiesel made that a necessity. Renderers and National Renderers Association (NRA) staff have spent a good deal of time with key members of Congress and their staff to inform them about the rendering industry. NRA and its members have made many contacts on Capitol Hill, especially during the annual NRA Congressional Fly-in held in June for the past 15 years.

Many times a simple phone call to inform and educate someone on Capitol Hill or at a regulatory agency can resolve a matter. There are enough NRA eyes and ears in play that an issue is often settled before it becomes one. Because of these efforts, NRA frequently gets calls from congressional offices seeking information or industry positions on matters of importance to renderers.

Transportation, trucking in particular, is critical for the rendering industry. NRA is calling on Congress to increase legal truck weights uniformly across the country. At the June fly-in, renderers explained the need for heavier trucks, while maintaining safety, and lobbied for action during their Capitol Hill visits.

As of mid-September, the House Transportation Committee was poised to vote on an NRA-supported amendment to allow states to permit heavier trucks with an extra axle and braking power on federal interstate highways within their borders. Specifically, trucks with up to 91,000 pounds gross vehicle weight would be allowed. Renderers operate some of the largest truck fleets in the United States (US) and many are now forced to travel under load capacity due to current lower weight restrictions. They are highly dependent upon trucks to transport 44 billion pounds of unprocessed animal by-products and rendered fats and protein meals each year. Safe, efficient, and timely trucking is essential for the rendering industry.

A recent NRA letter to Congress urged approval of this trucking amendment, explaining that "NRA members run company-owned and leased truck fleets to collect material and deliver out-bound recycled products. The federal highway

gross vehicle weight limit remains at 80,000 pounds, the level at which it was set in 1982. This forces fully-loaded trucks exceeding the federal weight limit to travel on state roads with higher weight allowances and greater safety challenges. Our trucks operate – like 25 percent of all trucking – less-than-truckload shipments. This puts more trucks on the roads to carry the same amount of product, burning more fuel, and increasing safety risks as more trucks travel more miles to meet demand. At the same time, NRA represents a North American industry. Both Canada and Mexico allow heavier trucks to operate on their federal highways, further eroding efficiency and putting US renderers and their trucks at a competitive disadvantage."

If the trucking amendment makes it out of committee, the House and Senate will need to approve it. There is a long road ahead, but hopefully this is an important start. However, the railroad lobby is opposing it over fears they will lose volume.

Tax legislation is also an NRA priority. Dozens of short-term tax provisions have expired or are expiring at the end of this year. Some, like incentives for research and development, have wide support since they are important to many companies across the US economy. Others, such as biofuels tax credits, are vital to renderers and others in the biofuels sector and are good for the nation overall to reduce greenhouse gas (GHG) emissions and diversify US energy sources.

NRA's member companies are actively engaged in the biofuels industry, either as refiners or as suppliers of large amounts of feedstocks. Renderers supply fats and oils to produce biodiesel, renewable diesel, as well as boiler fuel. These alternative fuels are petroleum distillate replacements, both on and off road, and include fuel for trucks, jets, and industrial furnaces. Rendered fats and oils account for 22 percent of the feedstock used in biodiesel production.

NRA supports congressional extension of important biofuels tax credits that expired December 31, 2014: the \$1-per-gallon blenders' tax credit for both biodiesel and renewable diesel, and a 50-cent-per-gallon alternative fuel mixture tax credit used by renderers who fuel their operations with their own production.

Originally, Congress made these short-term rather than permanent tax credits. In recent years, legislators have reauthorized them piecemeal for a year or two at a time. The biofuels industry has had to operate in hopes the tax credits will be renewed again and learn only at the end of each year if they have been approved retroactively for that year. Uncertainty like this is unreasonable for business, especially when it could be avoided by making these tax credits permanent. NRA fly-in participants urged their members of Congress in June to enact long-term biofuels tax credits to avoid this on-again, off-again uncertainty.

To avoid last-ditch legislating, in late July the Senate Finance Committee approved over 50 "tax extenders," including the NRA-supported biofuels tax credits, for two years retroactive

to January 1, 2015. The \$1-per-gallon biofuel and renewable diesel tax credits would remain a blender's credit in 2015 and become a producer's credit in 2016. The bipartisan tax package included provisions to assist families, individuals, and small businesses, and promote research and development investments. NRA joined other members of the Ag Tax Coalition, coordinated by the National Cattlemen's Beef Association, to encourage congressional approval of the tax extenders bill.

All eyes are on the House in hopes they will approve a similar bill this fall. Obama is expected to sign a final bill if they do. Opposition comes from those who object to funding the tax breaks or do not support specific incentives.

"While some tend to write-off tax extenders as special-interest giveaways, in terms of dollars," said Senate Finance Committee Chairman Orrin Hatch (R-UT), "the bulk of the extenders in this package go toward very popular, widely applicable provisions. To be exact, 51 percent of the dollars at play in this bill can be attributed to the following provisions: the research and development tax credit, small business expensing, the state and local sales tax deduction, bonus depreciation, and active financing income."

Unfortunately, these positive legislative changes don't make headlines. They are not sensational, but do make good business sense. Even so, the rendering industry cannot be complacent about other activities going on that can affect their business. The regulatory juggernaut continues. Members of Congress have attempted to curtail the Environmental Protection Agency (EPA) on a number of its proposed regulations with little or no luck.

The Food and Drug Administration (FDA) has finally released its long-awaited feed rules under the Food Safety Modernization Act (FSMA). NRA is analyzing the 666-page document to determine its full impact on the rendering industry and will inform members on how to comply (see "The Birthing Process of a Giant Rule: FSMA" on page 10). The NRA staff has worked closely with FDA for the past several years to ensure they understand rendering and to offer regulatory comments with workable solutions to comply with FSMA.

NRA participates in the Food Safety Preventive Controls Alliance with members across the feed industry to produce examples, training, and workshops to build the FSMA rules into industry practices. FDA expects to work closely with this group to train both industry and FDA investigators (soon to be called auditors). FDA believes training their auditors could take five to 10 years.

Hopefully, EPA will soon release its final Renewable Fuel Standard (RFS), which includes biodiesel and renewable diesel. EPA has not yet set the 2014 RFS volumes and earlier this year proposed multi-year volumes through 2017. In regulatory comments to EPA, NRA strongly recommended that EPA adopt RFS volume levels for biodiesel of at least 2.0 billion gallons annually in 2015 and 2016, and 2.3 billion gallons in 2017. The industry has the ability and capacity to exceed the RFS volumes in the agency's proposal, especially as production has consistently outpaced RFS volumes since the start of the program. Notably, EPA's proposal would only grow volumes to 1.9 billion gallons by 2017, which is just slightly higher than the industry's actual production of more than 1.8 billion gallons in 2013.

For advanced biofuel, NRA urged EPA to adopt a minimum of 3.2 billion renewable identification numbers (RINs) for the 2014 and 2015 RFS, and 4.0 billion RINs (on an ethanol-equivalent basis) for 2016. Production capacity exists to easily meet these volumes and lower RFS levels would be unreasonable.

The rendering industry encourages federal alternative fuel programs that are biofuel and feedstock neutral, and that ensures all biofuels, including biodiesel and renewable diesel, are treated

equitably. Renderers support continued development of the relatively young and eco-friendly biofuels industry. Biodiesel and renewable diesel contribute significantly to meeting the goals of the RFS program, including a reduction in GHG, technological innovation, enhanced energy security, and economic development. Biodiesel reduces lifecycle GHG emissions 57-86 percent more than petroleum diesel, according to EPA. The rendering industry provides a significant reduction in carbon dioxide equivalent (CO₂e) GHG emissions by sequestering about four times more CO₂e than it emits. NRA focuses on biofuel feedstocks from animal by-products and grease/oil collection and takes no policy position on other biofuels, such as ethanol.

By NRA's annual convention in late October, much more will be known about the future of important legislation and regulations that affect renderers. Hopefully you have made reservations to attend the convention in Dana Point, California, October 19-23. The program offers a great opportunity for renderers and industry friends to come together for information, education, and networking.

At the convention, NRA will have several policy committee meetings that address many of the challenges facing the industry. They may not all be headline grabbers, but they are pocketbook issues for most renderers. Importantly, a new Sustainability Committee will meet for the first time, a direct result of NRA's new Strategic Plan. I urge you to come and participate. Call the NRA headquarters at (703) 683-0155 for convention information or go online to <http://convention.nationalrenderers.org> to learn more and register to attend. I hope to see you there. **R**

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More Jail Time for Biodiesel Fraudsters

The summer was busy for prosecutors of multiple cases in which individuals attempted to profit from illegal activities surrounding biodiesel and tax credits.

Dean Daniels, 52, Richard Smith, 57, Brenda Daniels, 45, and William Bradley, 58, all of Florida, pleaded guilty and were sentenced in late August for charges related to a scheme involving the false production of biodiesel. All the defendants pleaded guilty to conspiracy to commit wire fraud and to defraud the United States. Dean Daniels also pleaded guilty to offering a hazardous material for transport without providing or affixing proper placards and was sentenced to 63 months incarceration. Bradley was sentenced to 51 months incarceration, Smith was sentenced to 41 months incarceration, and Brenda Daniels was sentenced to 366 days incarceration. In addition, the court sentenced the defendants to pay \$23 million in restitution.

According to court documents, the defendants profited by unjustly generating and selling biodiesel credits known as renewable identification numbers (RINs) for the production and blending of fuel that was not actually biodiesel. The defendants were all employees and officers of New Energy Fuels LLC, a business in Waller, Texas, that claimed to process animal fats and vegetable oils into biodiesel. The defendants subsequently relocated, conducting a similar operation at Chieftain Biofuels LLC in Logan, Ohio.

In the scheme, the defendants purchased low-grade feedstock and performed minimal processing to produce a low-grade fuel that was not biodiesel. They generated fraudulent biodiesel RINs and sold them to various third parties. The defendants also made false claims to the Internal Revenue Service (IRS) to obtain a \$1-per-gallon biodiesel tax credit they were not eligible to receive. In total, the defendants sold over \$15 million worth of fraudulent biodiesel RINs and received over \$7 million in false biodiesel tax credits.

In Las Vegas, James Jariv, 64, was sentenced in August to 10 years in prison for his role in illegal activities to generate fraudulent biodiesel credits and export biodiesel without providing credits to the United States. Jariv was also ordered to make restitution in the amount of \$6.3 million and to forfeit between \$4 million and \$6 million in cash and other assets.

First reported in the October 2014 *Render*, Jariv was the second defendant to be sentenced for the scheme. Nathan Stoliar, 64, of Australia, was sentenced in April 2015 to two years in prison for his role in the conspiracy and ordered to pay over \$1.4 million in restitution and forfeit \$4 million in cash. Jariv and Stoliar both pleaded guilty to one count of conspiracy, one count of conspiracy to engage in money laundering, two counts of wire fraud, and one count of making false statements under the Clean Air Act. In addition, Jariv's son, Alex Jariv, 28, also of Las Vegas, pleaded guilty to conspiracy to commit wire fraud, making false statements, and money laundering.

Beginning in September 2009, James Jariv and Stoliar operated and controlled a company in Vancouver, British

Columbia, Canada, that represented itself as a biodiesel producer. They also formed a company that was supposedly a supplier of feedstocks for biodiesel production. Alex Jariv worked for and on behalf of these companies. Using these and other closely-held companies, the three defendants claimed to produce biodiesel, then imported and sold the alternative fuel in the United States that generated RINs. In reality, no biodiesel produced was ever imported and sold. The men professed to blend the biodiesel with petroleum diesel, allowing them to sell the RINs separately from any actual biodiesel. Using this scheme, all three falsely declared to import, purchase, and blend more than 4.2 million gallons of biodiesel. They then sold the RINs and fraudulently generated more than \$7 million.

James Jariv and Stoliar also purchased and resold RIN-less 99 percent biodiesel (B99) as pure biodiesel, allowing them to charge substantially more for the product than it was worth. They exported significant amounts of the RIN-less B99 they bought in the United States to Canada and Australia, then sold the biodiesel in those countries and conspired to not acquire and provide RINs to the United States for these exports as they were required to do by law. In doing so, James Jariv and Stoliar failed to give to the United States RINs worth in excess of \$34 million, keeping this money for themselves instead.

Finally, all three men utilized foreign banking institutions and complex financial transactions to promote their illegal activities and distribute the proceeds.

In Tennessee, John Brichetto Jr., 61, of Knoxville, was sentenced to 10 years in prison after being convicted in July of stealing \$142,215 of a state loan awarded to be used for a biodiesel plant and equipment. His wife and co-defendant, Lisa Horn Brichetto, was also found guilty in the scheme and is awaiting sentencing.

The Brichettos were the principals in Northington Energy LLC, which received grants and loans to build a biodiesel production facility near Wartburg, Tennessee. In addition to the grants and loans — of which only \$4,908 was reportedly used to buy equipment — the state contributed \$293,000 worth of utilities and \$150,000 for a road. The United States Department of Agriculture also funded \$25,000 for site improvements and Morgan County provided \$9,000.

Argent Energy Begins Second Phase of Plant

After building a high free fatty acid esterification unit in January 2015, Argent Energy (UK) Limited in Motherwell, Scotland, once again hired BDI — BioEnergy International AG for the second phase of the project in August at a cost of 30 million euro (\$1.1 million). The new plant will allow Argent Energy, a subsidiary of John Swire and Sons Ltd., to convert commercial and industrial waste fats with a high free fatty acid content into biodiesel.

British Producer Buys Another

Olleco, the United Kingdom's largest converter of used cooking oil and food waste into biodiesel, has acquired Convert2Green Ltd, a Cheshire producer of biofuels used in the power, heat, and transportation sectors. The combining of the two companies increases the number of Olleco's depots to 17 across the United Kingdom. It also has three bio-refineries, a biodiesel facility in Liverpool that utilizes used cooking oil as its feedstock, and employs 550 workers.

California City Fleet Converts to Renewable Diesel

The City of Walnut Creek, California, is converting its diesel-powered fleet to renewable diesel supplied by NeXgen Fuel and Golden Gate Petroleum in Martinez, California, which uses rendered fats and greases to produce the alternative fuel.

The switch to renewable diesel will reduce the city's diesel emissions by more than 60 percent, lower its petroleum fuel needs by more than 20,000 gallons, and continue its efforts to reduce greenhouse gas emissions, according to fleet supervisor Joe Jorgensen. The city has 60 diesel-powered vehicles and equipment, which includes street sweepers, dump trucks, tractors, and mowers, all taking advantage of the new fuel.

In 2012, the City of Walnut Creek adopted a Climate Action Plan with an overall greenhouse gas reduction goal of

15 percent below 2005 levels by the year 2020. The city found the top three sources of emissions are the transportation sector (59 percent), residential energy use (18 percent), and commercial energy use (18 percent).

EU Extends Import Duties on US Biodiesel

The European Commission has extended anti-dumping and anti-subsidy duties imposed on biodiesel imported from the United States (US) for an additional five years, until September 2020. The commission set the duties in 2009 on a number of US producers in response to pleas by European Union (EU) producers who claimed the subsidized US fuel was creating unfair competition and harming domestic production. At the time, US producers were receiving a \$1-per-gallon tax credit, which has expired and been renewed several times. It most recently expired December 31, 2014, but the US Senate Finance Committee approved a bill in July that would reinstate the credit retroactively to January 1, 2015. The House of Representatives has not yet introduced a similar measure.

Injuries Suffered in REG Fire

Renewable Energy Group's (REG's) 75-million-gallon-per-year renewable diesel plant in Geismar, Louisiana, experienced an explosion and fire in early September that

Continued on page 35



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Rendering Sustainability – an Alternate View

There should be little argument that rendering is the most efficient and effective industrial method used to process animal by-products. The process of rendering destroys pathogens, separates solids and liquids, and sterilizes and dehydrates raw materials to produce safe and stable finished products of animal protein meals, fats, and oils. The methods for raw material collection are also effective and efficient.

The concept of recycling continues with these finished products being used in various animal agriculture industries for feed manufacture and aquaculture. Further, rendered products are effectively used in the production of pet foods, oleochemicals, and biofuels. The phrase describing the industry as “the original recyclers” holds true.

When questioned, renderers should be able to present the facts of what they do and how they do it proudly. To help with explaining what the rendering industry does, both the National Renderers Association in the United States and the European Fat Processors and Renderers Association have developed infographics with statistics depicting the enormity of the rendering industry in their respective regions.

“Recycling” shows rendering’s environmental credentials front and center, but the term now heard more frequently is sustainability. However, the definition, or rather the concept, of sustainability is not absolutely clear cut. In fact, sustainability is more complex than recycling as there are three factors for consideration: environmental, social, and economic.

Bill Spooncer, former World Renderers Organization (WRO) Technical Advisory Committee member, noted recently that although sustainability was the theme of the 2013 Australian Renderers Association (ARA) International Symposium, he wonders if the global rendering industry is making enough progress in this direction. At the 2015 ARA symposium, James Rose, managing director of Skretting Australia, and Kevin O’Grady, director and principal consultant of Pinnacle Quality, reminded renderers of the need to be recognized as a sustainable industry. Spooncer explained that “the original recyclers” is a fine catchphrase, but the industry needs more substance to back sustainability claims.

When further investigating the definition of sustainability, “sustain + ability” equates to the ability to sustain. A report from Australia’s Industry Skills Councils on meeting this challenge provides the following definition: Environmental sustainability requires the design and provision of products and services that incorporate and promote waste minimization and the efficient and effective use and reuse of resources.

Former WRO President Stephen Woodgate supports the idea of the group taking a proactive stance on sustainability.

“The concept of sustainability might not be obvious to all,” he stated before recalling that Leo den Hartog, Nutreco, encouraged renderers to think along these same lines both in 2013 in Australia and in 2014 in Europe.

In preparation for this article, Caitlin Doyle, rendering intern at CSF Proteins in Melbourne, Australia, researched

and developed the list of questions below that might be used as a starting point for the rendering industry. The list could provide a systematic approach to evaluate assertions about the industry’s sustainable credentials that should be based upon facts, if available. The challenge is that each plant is different so how does the industry measure this?

What are your thoughts? Do you think the global rendering industry should be thinking of how to assess its sustainability “credentials”? What facts are available? If the facts are not obtainable, then is this the time to work on how the rendering industry is defined? Could industry benchmarking of resources for electricity, gas, oil, water, and waste be examined? The WRO leadership welcomes your input by e-mail at tim.juzefowicz@csfproteins.com.au or fmf@rengra.com.mx. **R**

Example Sustainability Questionnaire

Environment

1. What systems can be put in place to reduce resource usage (i.e., water, electricity, natural gas, coal)?
2. Are there opportunities to generate resource types (e.g., wastewater recovery, steam recovery, methane recovery, water harvesting, biofuels, solar energy, geothermal energy, wind energy, etc.)?
3. How can the industry improve waste/wastewater management systems?
4. Are there systems in place to address odor?
5. Are there any areas onsite that have the ability to use solid/liquid waste (e.g., landscaping, washing facilities)?
6. Does wastewater meet water authority standards? Is there room for improvement?
7. Are practices compliant with government environmental regulations?

Economic Vitality

1. What is being done to ensure good employment (e.g., retirement contributions, etc.)?
2. Is there a level of financial stability achieved?
3. Can all projects be financially justified?
4. Are there any grants/rebates/programs available to assist in further sustainable development?
5. Are there opportunities for product recovery to further increase income?
6. In reference to questions 1 and 2 under Environment above, have economic benefits been considered and are payback periods reasonable?
7. Considering the many products derived from the rendering process, are all products attempted within appropriate means to further ensure all profit opportunities are being utilized?

Healthy Communities

1. Are odor complaints recorded and investigated and resolution sought?
2. Is the community well-informed of the contributions that the rendering industry offers to society?

3. What financial contributions/donations are being returned to the community?
4. What is the image the rendering site projects to the public and suppliers?
5. What type and how well is the relationship between the site and municipal authorities?
6. Is the site involved in any community/environmental programs?
7. What overall role does the site play in the internal/external and greater community?

Mark Your Calendar

October

American Fats and Oils Association 2015 Annual Meeting

October 7-8, New York City, NY • www.fatsandoils.org

National Renderers Association 82nd Annual Convention

October 19-23, Dana Point, CA • <http://convention.nationalrenderers.org>

November

American Oil Chemists' Society Oils and Fats World Market Update

November 12-13, Dublin, Ireland • <http://worldmarket.aocs.org>

Canadian Bioeconomy Conference

November 30-December 2
Vancouver, British Columbia, Canada
<http://greenfuels.org>

January 2016

Association of American Feed Control Officials 2016 Midyear Meeting

January 16-18, Isle of Palms, SC
<http://www.aafco.org>

National Biodiesel Conference and Expo

January 25-28, Tampa, FL
<http://biodieselconference.org/2016>

International Production and Processing Expo

January 26-28, Atlanta, GA
<http://ippexpo.com>

International Rendering Symposium

January 28-29, Atlanta, GA
http://www.ippexpo.org/edu_prgms/

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Low-energy Process for Concentrating Stick Water

Dr. Scott Husson, professor of chemical and biomolecular engineering and a member of the Clemson University Animal Co-Products Research and Education Center (ACREC), has initiated a research project to evaluate a low-energy input process for concentrating rendering stick water. In his study, Husson will be evaluating an emerging membrane technology that holds promise for concentrating wastewater to high solids content.

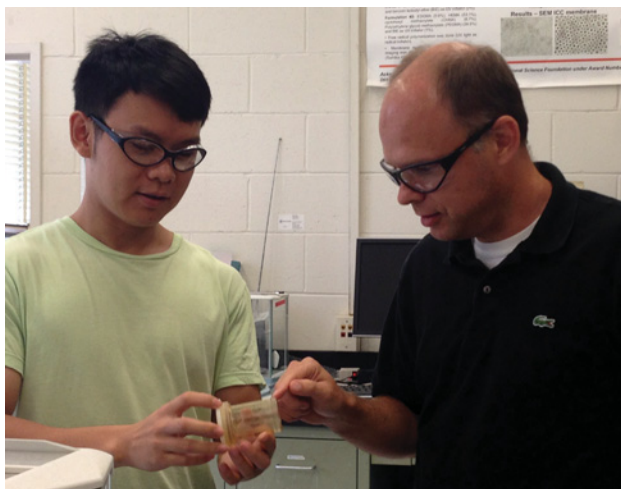
The study will evaluate commercially available membranes under a wide range of operating conditions to determine the process productivity and maximum concentration achievable for stick water. In addition, a preliminary cost analysis will be conducted to compare the relative cost of energy input and consumables for using the membrane technology versus energy costs involved in an evaporative concentration process.

Dewatering stick water to recover proteins is currently done by evaporation and drying. Typically processed in a drum or disc dryer, these high-temperature operations are energy intensive, costly, and can damage the nutritive value of some of the recovered proteins. Spray drying may be an option but the low solids content of typical stick water means that it must be pre-concentrated to greater than 50 percent solids by weight prior to spray drying in order to be commercially feasible. Husson's proposed work aims to develop a membrane alternative to evaporation for pre-concentrating stick water to a level that would enable spray drying to be used.

Before submitting his pre-proposal to the ACREC Research Committee, Husson conducted a proof-of-concept preliminary experiment during which he was able to concentrate chicken feather stick water from 10 percent solids by weight to 38 percent solids. The initial data were promising but only examined whether concentration was possible with the new membrane technology.

There are several operating variables that can influence the rate of water removal and the maximum concentration that can be achieved. In his preliminary experiment, Husson determined that conventional membrane systems such as ultrafiltration and reverse osmosis were unsuccessful in the first-stage concentration of the stick water due to high resistance caused by deposition of solids on the membrane surface. In his prior ACREC work, Husson learned that this resistance will increase with applied pressure because the solids layer is compressible. However, using the proposed new membrane technology to dewater the stick water seems to have great promise.

In his initial rough calculations, Husson estimated the proposed membrane technology would use only 1.3 percent of the energy that would be required to thermally evaporate the same volume of water from stick water, assuming no heat integration. This energy reduction is attributed to the fact that the membrane process does not require an evaporative phase change of water from liquid to vapor. Replacing the energy-



Clemson University post-doctoral researcher Dr. Jinxiang Zhou (*left*) and professor of chemical engineering Dr. Scott Husson discuss their low-energy input project to concentrate stick water.

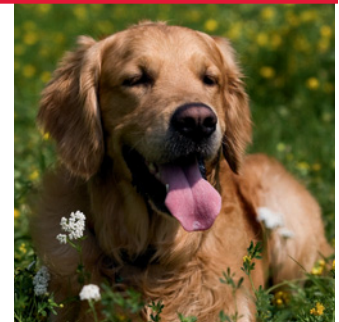
intensive evaporative process with the proposed low-energy membrane process could yield significant cost savings for the rendering industry.

Husson is being assisted in the laboratory research by post-doctoral researcher Dr. Jinxiang Zhou. Currently, the team is evaluating the roles of important operating variables that influence the rate of water removal and the maximum achievable concentration. Their work will develop a comprehensive understanding of how these variables impact process productivity and economics. They have constructed a laboratory batch filtration apparatus to conduct the study. As expected, early stage results indicate that operating variables such as agitation rate and temperature play a significant role on the final concentration of stick water. Increasing the agitation rate improved membrane performance and achieved stick water concentrations above 40 percent solids. Husson is hoping that during the course of this study, he can demonstrate concentration of stick water to 50 percent or more solids by weight.

The team is continuing their laboratory work and will subsequently conduct a cost study. Replacing the high-temperature, energy-intensive evaporative process for concentrating stick water with the proposed low-energy, low-temperature membrane process is expected to reduce operating costs and preserve the nutritive value of recovered proteins for the benefit of the rendering industry.

Husson has conducted other successful ACREC projects on membrane-based wastewater treatment. He is a member of a research team that was recently awarded \$970,000 from the National Science Foundation to study membrane technology for producing clean water.

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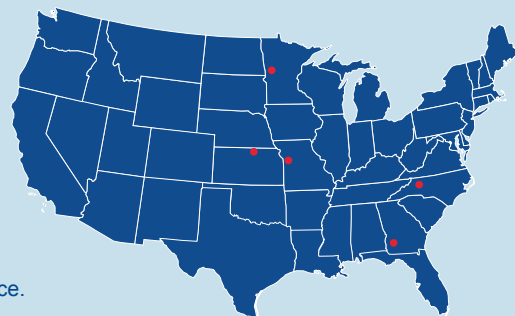
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Workplace Violence

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

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Employers today can find themselves in a seemingly untenable dilemma when violence threatens to invade their workplace. Two recent cases illustrate the competing liabilities that employers face in their decision-making as to how to respond to workplace violence.

In one case, decided by the United States Court of Appeals for the Ninth Circuit, the employer, a superalloys casting company, chose to fire an openly hostile employee making death threats to avoid potential injury to its employees. The employer faced the prospect of costly litigation, including an Americans with Disabilities Act (ADA) lawsuit.

In the other case, decided by an Occupational Safety and Health Review Commission (OSHRC) administrative law judge, a healthcare provider company did not perceive or protect a social service coordinator who was fatally stabbed outside a client's home from the hazard of workplace violence.

Case Background

Employer Response to Violence Upheld

In the first case, the plaintiff appealed the federal district court's grant of summary judgment in favor of his former employer on his claim of discrimination in violation of Oregon disability law (*Mayo v. PCC Structural Inc.*, July 28, 2015).

The district court concluded that because the plaintiff, Timothy Mayo, had threatened to kill his co-workers, including his supervisor, he was not a "qualified individual" under section 659A.112 of the Oregon Revised Statutes, which is Oregon's counterpart to the ADA. The district court indicated that in following the decisions of numerous other circuit courts, Mayo was no longer a qualified individual once he made his violent threats. Because Mayo was not a qualified individual in the eyes of the court, he was not "entitled to protection under the ADA and Oregon's disability discrimination statute."

In its discussion affirming the lower court decision, the circuit court of appeals found that even if the plaintiff were disabled (which it assumed was true for the appeal), "he cannot show that he was qualified at the time of his discharge. An essential function of almost every job is the ability to appropriately handle stress and interact with others." For instance, in a frightening recitation of the court record, the plaintiff told a co-worker that he "fe[lt] like coming down

[to work] with a shotgun an[d] blowing off' the heads of the supervisor and another manager. The co-worker need not worry, Mayo explained, because she would not be working the shift when the killing would occur."

After these statements were reported to company management, a timely investigation was conducted. Written statements were obtained from co-employees regarding the threats. When the plaintiff was asked by management if he planned to carry out these threats, the plaintiff responded that "he couldn't guarantee he wouldn't do that." The company management immediately suspended the plaintiff's employment, barred him from company property, and notified the police.

After the plaintiff's suspension and interview by police, he was voluntarily admitted to the hospital because he was deemed to pose a danger to himself and to others. He remained in custody for six days and then took a two-month leave under the Oregon Family Leave Act and federal Family and Medical Leave Act. Near the end of his leave period, a treating psychologist cleared him to return to work, writing that he was not a "violent person," but recommended a new supervisor assignment. While the parties dispute the timing, the employer decided to terminate the plaintiff during his medical leave. The company determined that his threats were of such severity that he was unqualified to work with any supervisors or co-employees and that it could not expose its employees to potential workplace injury.

In response, the plaintiff brought this case, seeking damages. The district court granted the employer's motion for summary judgment, which the circuit court of appeals affirmed.

Employer Response to Threatening Conduct Found Inadequate

In the second case, OSHRC Administrative Law Judge Dennis L. Phillips issued an opinion that a healthcare provider company did not protect a social service coordinator who was fatally stabbed outside her client's home in December 2012 (*Secretary of Labor v. Integra Health Management Inc.*, June 22, 2015).

The employer in this case, Integra Health Management Inc., provided mental and physical health assessments and coordinated healthcare/case management services for insureds of insurance companies. One of its employees was a 25-year-old newly-hired service coordinator (SC) with about three months on the job. The employee had no prior experience in the community health or social work industries and her employment office consisted of a virtual office in her home. She also used her computer, a phone, and car to travel to clients' homes.

In October 2012, the employee planned to drive out to a client's apartment to make an unscheduled visit. The client was a diagnosed schizophrenic and on the employee's list of

clients, known as “members,” for which she was responsible. The client had a history of violent behavior and had been convicted of violent crimes and incarcerated for many years. The employee was not advised about the client’s history of mental illness or violent behavior when he was assigned to her. The employee had made several attempts to contact the client by telephone, which were unsuccessful.

As planned, the employee visited the client in October 2012 by going to his house unannounced. She introduced herself and the company and arranged a return visit to conduct an initial assessment. The employee reported in her progress note report for that day that during their conversation, the client “said a few things that made [her] uncomfortable, [she] asked [the client] to be respectful or she would not be able to work with him.” She also documented in her progress note report that “[b]ecause of this situation, [she] is not comfortable being inside alone with [the client] and will either sit outside to complete assessment or ask another SC to accompany her.”

A number of subsequent meetings and conversations occurred between the employee and the client including further notes in the employee’s progress note report regarding her concerns. In December 2012, the employee was fatally stabbed by the client during her visit to his home.

Following the incident, the Occupational Safety and Health Administration (OSHA) issued two citations to Integra Health Management claiming a violation of the General Duty Clause, section 5(a)(1) of the OSH Act, and a violation of OSHA’s injury reporting standard. Specifically, the General Duty Clause citation alleged that the employer did not furnish employment and a place of employment that were free from

recognized hazards that were causing or likely to cause death or serious physical harm to employees. The citation alleged that employees were exposed to the hazard of being physically assaulted by clients with a history of violent behavior.

The judge determined that the employer’s workplace violence policy was inadequate, the employee training was insufficient, and the employer failed to provide the employee with information about the medical background as well as the criminal history of the client.

More importantly, the judge determined that the employer did not monitor the employee’s progress notes that identified her concerns about the client and did not take affirmative action to assist her when she indicated her continuing anxiety about their interactions.

Legal Ramifications Employers Should Consider

In *Mayo*, the employer took steps to protect its employees from threatened harm by conducting a timely investigation, suspending, and eventually terminating the aggressive and threatening employee. The company’s actions forced it to respond to discrimination claims under the ADA that initially were filed in state court, and removed in federal court. While the employer prevailed in the district and circuit courts, the company undoubtedly spent considerable sums defending the suits. While this litigation was very time consuming and expensive, the employer avoided a tragic outcome.

Unfortunately in *Integra*, the employer did not respond to or take any actions to address any sense of fear or anxiety

Continued on page 33



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Understanding the Complex Energy Marketplace

It can be difficult to stay abreast of all of the factors continually impacting energy costs that are in the top five budgetary items for many rendering companies. Here is an interesting bit of data: There are 3,292 electric utilities in the United States that have 18,300 different rate classes, which equates to over 95,000 discrete tariff pages across those rate classes. Key point: this is only for electricity. Not included in those numbers is natural gas, liquid fuels, water, or sewer.

With these overwhelming figures, it is no wonder that companies do not have the time or internal resources to devote to fully understanding their energy requirements. Some companies look to outside expertise for assistance in getting control of their energy costs and becoming more competitive in the marketplace. In the August *Render Tech Topics* column, some insight was given on how to begin the process of taking control of energy costs by first looking at three things: (1) how the company uses energy, (2) when the energy is used, and (3) how much energy is used. Understanding these basics will serve as the cornerstone to starting the process in developing an overall comprehensive strategy.

Just what is a comprehensive energy strategy? It starts with reviewing the following:

- Current costs and usage and associated management reporting;
- Existing energy supply strategy;
- Procuring the energy needs and the utility/supplier contract negotiations;
- Utility tariffs available;
- Potential natural gas pipeline bypass options;
- State and federal regulatory actions and updates;
- Demand response programs;
- Self-generation of power needs;
- Combined heat and power solutions;
- Demand-side management;
- Transportation;
- Energy efficiency programs and invoice audits for accuracy checks; and
- Risk management.

With the proper packaging of some or all of these functions along with others that are specific to a company's needs, the outcome is a customized overall comprehensive resilience energy strategy that will reduce the complexity in taking control of an energy budget. However, it is important to have an understanding of the many factors that complicate the energy industry and how to make a company's specific energy strategy become a useful tool going forward in taking control of costs.

The procurement process of how and when to buy energy is very important in order to take advantage of market opportunities. It involves monitoring energy commodities futures markets and the fundamental/technical factors that impact the market as well as traders, which could identify the development of potential price trends. The New York

Mercantile Exchange futures, basis markets, index versus basis pricing, fixed pricing over a longer period of time, time-of-use pricing, day-ahead pricing, block pricing, the percentage of monthly volumes to contract, and so on, are just some of the check-off points involved. Setting target prices and a percentage of volumes to hedge is good preparation to be ready to move on a downward price trend in the market.

A utility tariff review is an important step to ensure a user is on the most appropriate rate schedule for a plant's current operations as it applies to how and when energy is used. Utilities file their tariffs with the state public utilities commission, which serves in an overseer role and reviews all rate increase filings. The commission either approves in full or in part the rate changes through a series of public hearings where consumers have the opportunity to submit their views into the record. Staying on top of regulatory issues and utility rate changes will prepare a company for increased costs or changes coming down the road.

Having a reporting system that can track a facility's energy usage and cost is an important tool in a comprehensive energy strategy program. The system should be able to report plants separately or by region or division, and show current fiscal year monthly data compared to the previous year's data.

Electricity is one of a company's greatest resources, but is also one of the most vulnerable in terms of an interruption or service outage. Nearly every essential service that an organization provides depends on electricity. What happens to an operation and product production when the power goes out for a few hours, or a few days, or possibly longer? What can be done to ensure a more reliable power source during such periods of curtailment or grid interruptions?

One solution could be self-generation or a combined heat and power solution for peak power needs achieved by the use of gas-fired generators and using the process heat for steam or hot water production. This would allow a facility to have full operational capabilities during times of crisis, eliminate disruption of service or a need for curtailment called for by the electric utility company, and provide maximum value of the energy produced. In some areas of the United States, this solution can be implemented at or below the current utility cost. The main point here is that by using a combination of strategies, companies can control about 70 percent of energy costs over time and not be subject to electric utility rate increases or surcharges, while providing fully resilient capabilities.

In summary, there are many strategies that can be developed to maximize the value of the Btu, electron, or gallon. Understanding how and when energy is used in a plant is the foundation for a comprehensive strategy for energy use. Having hard data and being aware of options in the marketplace will show you the optimal path to discover and implement the right strategy for a facility and the overall company.

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mentioned in the employee's client visit notes. A serious OSHA violation occurs when there is substantial probability that death or serious physical harm could result from a hazard about which the employer knew or should have known. The judge found that the healthcare company's approach to safety was inadequate, and that the company should have taken precautions to prevent injury by developing a meaningful written policy, hiring and training its employees appropriately, and responding to complaints in a timely manner. While the company only faced an OSHA fine of \$7,000 in proposed penalties for the General Duty Clause violation, it sustained the tragic loss of an employee as well as a worker's compensation death suit.

Recent OSHA Guidance

The *Mayo* decision may give some sense of security to those employers that make hard choices for what it believes are the right reasons, that is, for employee safety. But choices are not always easy, and the resulting actions can be costly.

The *Integra* decision is timely in view of another recent OSHA action relating to the healthcare industry. Recently, OSHA released an "Inspection Guidance for Inpatient Healthcare Settings" that will focus its inspectors' attention to workplace violence, musculoskeletal disorders, blood-borne pathogens, tuberculosis, and slips, trips, and falls. The guidance, which is effective immediately, focuses on hazards that were included in OSHA's recently-concluded National Emphasis Program on Nursing and Residential Care Facilities, CPL 03-00-016.

Particularly, the guidance indicates that workplace violence is defined as violent acts (including physical assaults and threats of assaults) directed toward persons at work or on duty. OSHA notes that workplace violence is a recognized hazard in hospitals and in nursing and residential care facilities. According to OSHA, in the healthcare and social assistance sector, 13 percent of the injuries and illnesses were the result of violence, while "15 percent of the days-away-from-work cases for nursing assistants were the result of violence." Accordingly, workplace violence will be evaluated in every inpatient healthcare OSHA inspection.

While the inspection guidance is for "inpatient" healthcare settings, employers in other industries can be certain that they will also be inspected by the same OSHA inspectors as healthcare

workplace violence incidents occur, regardless of the setting, including non-healthcare workplaces as well. The guidance noted that "because these hazards are nationwide, state plans are expected to follow the guidance."

Recommendations

Against this potential liability scenario, an employer must develop an effective written workplace violence policy that must be communicated to all employees if it hopes to have any defense against these potential claims and to prevent a tragic incident. At a minimum, the written workplace violence prevention policy should include the following elements:

- Stated management commitment to protecting employees

Continued on page 35

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Tyson Closes Iowa Beef Plant

Tyson Fresh Meats, a subsidiary of Tyson Foods Inc., has permanently ceased beef operations at its plant in Denison, Iowa, due to the continued lack of cattle. The move will better align the company's overall production capacity with current cattle supplies. The rendering operations at the Denison plant will continue with approximately 20 employees, processing by-products from other Tyson locations.

"This was a very difficult decision because it affects the lives of our people, their families and a community that has supported this plant for more than 50 years," said Steve Stouffer, president of Tyson Fresh Meats. "However, the realities of the beef business have changed and we must continue to change with it to remain successful."

Tyson is offering its 400 affected workers an opportunity to apply for jobs at other company locations along with financial incentives to hourly workers who qualify for production openings at the company's Lexington, Nebraska, beef plant. State workforce officials have been invited to inform affected workers what type of unemployment benefits and retraining opportunities are available to them. Eligible displaced workers will receive 60 days of pay, as required by the Worker Adjustment and Retraining Notification (WARN) Act.

"The cattle supply is tight and there's an excess of beef production capacity in the region," said Stouffer. "We believe the move to cease beef operations at Denison will put the rest of our beef business in a better position for future success."

Tyson's Denison beef plant has a long, rich history in the meat industry since opening its doors in 1961 as the first plant operated by Iowa Beef Packers (IBP), a start-up company that grew to become one of the world's leading beef processors. IBP was acquired by Tyson Foods in 2001 and renamed Tyson Fresh Meats.

Tyson Fresh Meats' other beef plants are located in Amarillo, Texas; Dakota City, Nebraska; Finney County, Kansas; Joslin, Illinois; Lexington, Nebraska; and Pasco, Washington.



Industry Mourns Former Renderers

The rendering industry said farewell to two industry veterans this past summer.

Charles Louis Tocalino, past owner and operator of Modesto Tallow Company, died in August at the age of 85. He was on the board of directors for the National Renderers Association (NRA) and Fats and Protein Research Foundation (FPRF) during the 1960s and served as president of the Pacific Coast Renderers Association from 1965 to 1966. Tocalino is survived by three children, seven grandchildren, and a sister and brother.

Leonard "Len" Anderson, former president of Carolina By-Products, Greensboro, North Carolina, also passed away in August after a short illness. He worked at Carolina By-Products from 1958 to 1988 and was an active participant in NRA committees and FPRF. Anderson's many accomplishments included performing research that led to the founding of Chemol Company, Carolina By-Products' chemical division, and the commercialization of high quality tallow and poultry fats and proteins for biodiesel, agricultural adjuvants, methyl esters, and dairy bypass fats and proteins.

In retirement, Anderson perfected his bluegrass musical talents and became charter captain of his sailboat *Banjo*. He also helped create, manage, and expand a series of coastal retail stores named Harbor Specialties.



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sent four people – one employee and three contractors – to the hospital with serious injuries and burns. The plant was nearly finished being rebuilt after suffering a fire in April that injured two employees. According to news reports that cite sheriff's deputies, the explosion last month was sparked from a hydrogen line undergoing maintenance.

REG purchased the shuttered Geismar facility from Syntroleum and Tysons Foods in June 2014 and restarted production that October after investing \$15 million in the facility, part of which was used to expand the plant's feedstock capacity.

Renewable Diesel Available in Southern California

Propel Fuels is now offering a high performance renewable (HPR) diesel fuel at locations across Southern California utilizing Neste's NEXBTL renewable diesel. Propel's "diesel HPR" is a low-carbon, renewable fuel that meets ASTM International D-975 quality standard for petroleum diesel and can be used in any diesel engine.

In addition to new retail locations, Propel is making its diesel HPR available in bulk for business and government fleets statewide. The fuel is bundled with the company's patented CleanDrive emissions accounting software, allowing fleets to easily quantify and report greenhouse gas reductions and air quality benefits.

Diesel HPR debuted in March 2015 at 18 Propel stations across Northern California, where the company has seen very strong consumer response. A 300 percent increase in gallons was sold the first three months compared to its former 20 percent biodiesel product. Propel customers have also provided overwhelmingly positive feedback on the fuel.

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against the hazards of workplace violence, including both physical acts and verbal threats;

- Statement that the employer has a "zero tolerance" policy toward threats or acts of violence and will take appropriate disciplinary action against employees who engage in such conduct;
- Identify means and methods for employees to notify the employer of perceived threats of violent acts in a confidential manner;
- Establish a means to promptly investigate all such threats or violent acts;
- Develop consistent, firm discipline for violations of the policy;
- Provide training for managers and employees to identify signs and symptoms of employee behavior that may predict potential violence (i.e., erratic behavior; employee comments regarding homicide or suicide; provocative communications; disobedience of policies and procedures; presence of alcohol, drugs, or weapons on the worksite; physical evidence of employee abuse of alcohol or drug use), which should be reported immediately to the employer;
- Establish a team of qualified individuals (e.g., human resources, risk managers, legal, medical, security) either within the company or readily available third parties to respond to a potential or actual incident; and
- Consider establishing an employee assistance plan to provide support to employees who may be experiencing mental or emotional stress before an act of violence occurs.

Readers wishing to receive complimentary copies of this article and future articles on OSHA and employment law-related topics can e-mail Mark A. Lies II at mlies@seyfarth.com to be added to the mailing list.

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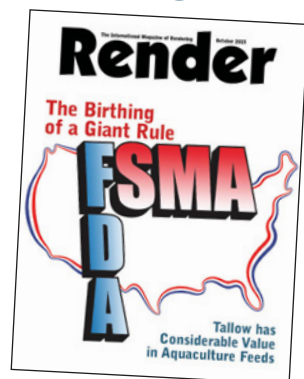
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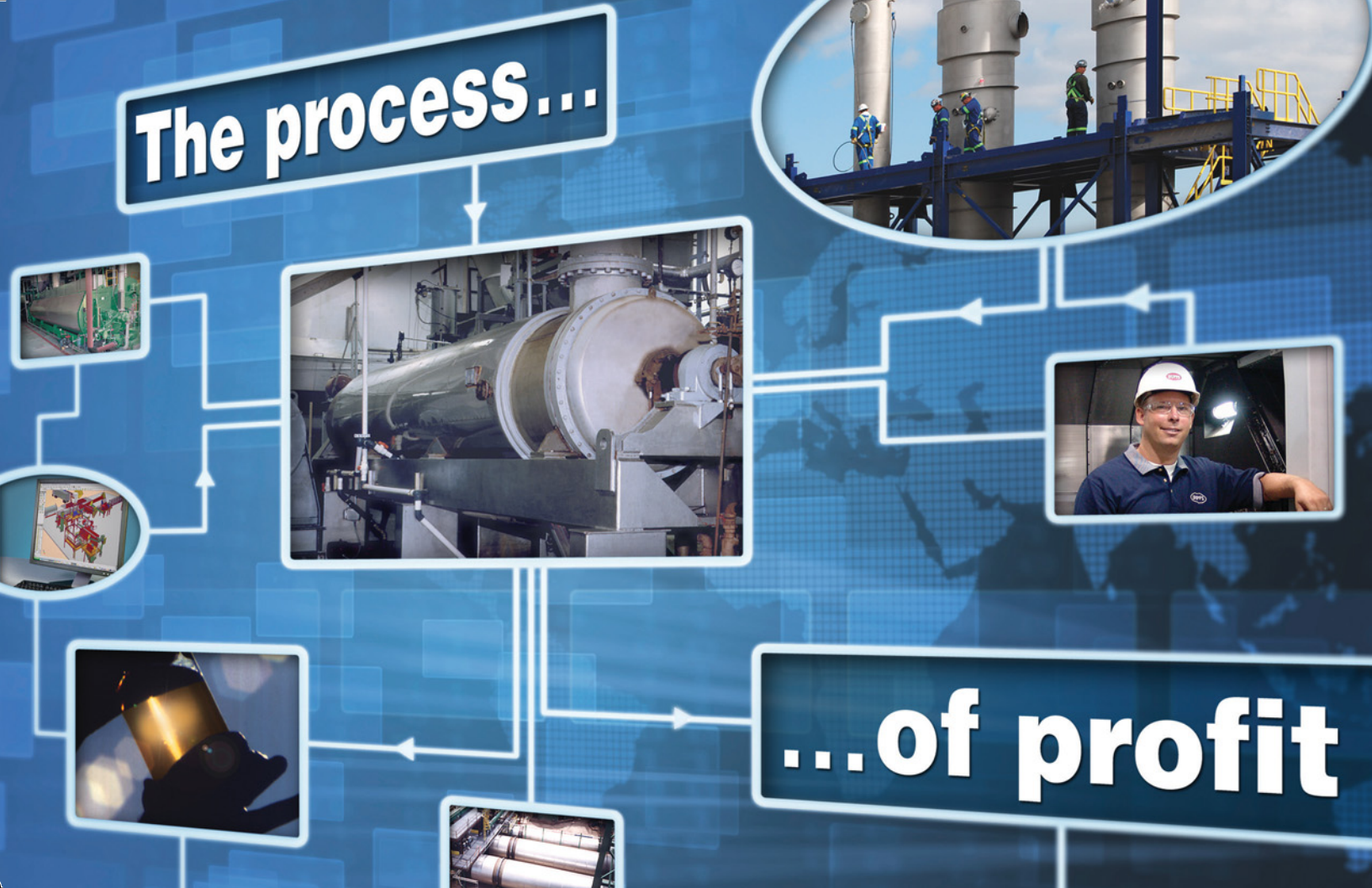
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The process...



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