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The International Magazine of Rendering June 2017

Livestock's Contributions

To climate change: Facts and fiction

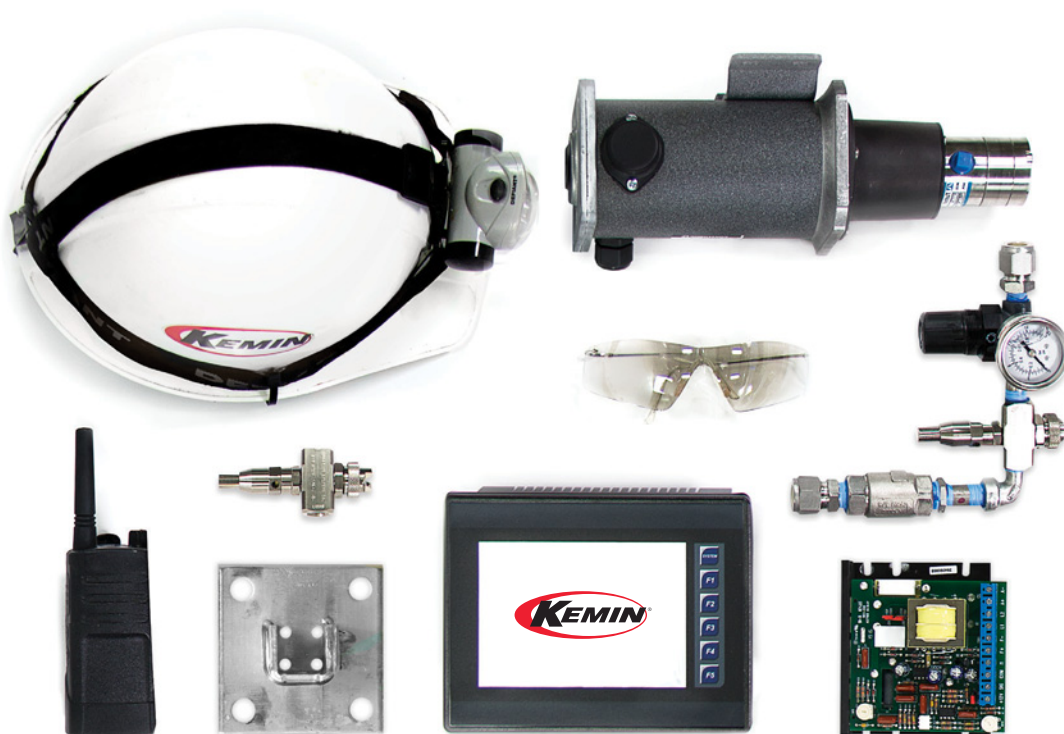
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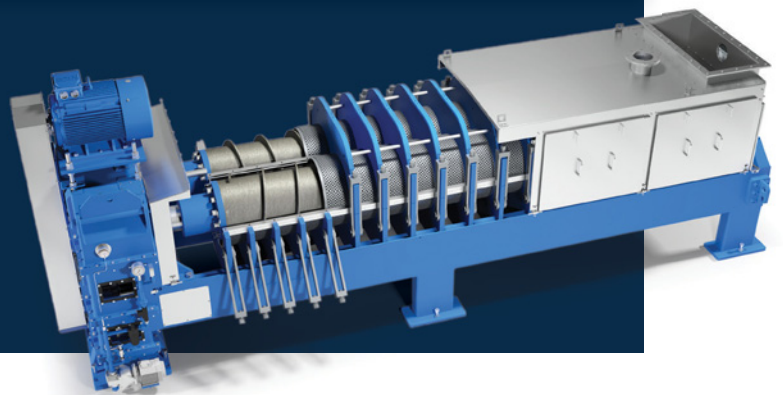
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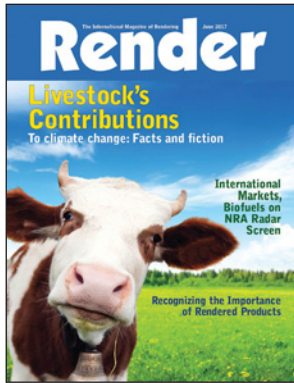
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On the Cover

Debunking the myths that livestock significantly contribute to greenhouse gas emissions.

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Render (ISSN 0090-8932) is published bimonthly under the auspices of the National Renderers Association by Sierra Publishing, 1621 Glen Dr., Placerville, CA 95667 as a public service to the North American and global rendering industry. It is intended to provide a vehicle for exchange of ideas and information pertaining to the rendering and the associated industries. *Render* is distributed free of charge to qualified individuals upon written request. Publisher reserves the right to determine qualification. Periodical postage paid for at Camino, CA, and additional mailing offices.

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Printed in USA

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

Renderitorial

United States (US) President Donald Trump was busy this spring getting key government department leaders nominated, confirmed by Congress, and in place. One such appointment welcomed by agriculture was Sonny Perdue as the 31st Secretary of Agriculture.

Perdue is uniquely qualified as a former farmer, agribusinessman, veterinarian, state legislator, and governor of Georgia and jumped into his new job with gusto. On his first day in office, he and Trump held a “farmers roundtable” at the White House where issues facing the American agriculture community were addressed and the president signed an executive order establishing an Interagency Task Force on Agriculture and Rural Prosperity. The roundtable featured more than a dozen farmers and representatives of the ag community who discussed a variety of topics with Trump and Perdue, including agricultural trade, regulatory reform, rural investment and infrastructure, labor issues, and the farm bill.

Days later, Perdue announced the creation of an undersecretary for trade and foreign agricultural affairs in the US Department of Agriculture, recognizing the ever-increasing importance of international trade to American agriculture. The new undersecretary position is a good move to raise the profile and importance of these issues within the department and for agriculture government-wide. In addition, the timing is right with North American Free Trade Agreement negotiations likely to start this fall and many rendering industry trading partners uncertain about their economic relationships with the United States. Industry supported creation of this new undersecretary position in the last farm bill, but it was never implemented under President Barack Obama.

Two other milestones since Perdue took office are the first arrival of US beef in Brazil since 2003 and the return of US beef to China after a closure in 2004. Both markets are important to American beef producers – and renderers.

It appears support for agriculture is off to a running start in this new presidential administration. **R**



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Tightly Held Purse Strings

Nearly as certain as death and taxes is the reality that every new presidential administration comes into office pledging to slash the federal budget to the bone. Almost as certain is the fact such publicly pledged thrift will not happen, yet it never stops the newly minted bureaucrats from trying.

Such is the case with the United States (US) White House budget “blueprint” released in March, an ambitious proposal to cut discretionary federal spending across the board by \$54 billion in order to increase military investment by that same amount over the next 10 years. No conservative worth his or her salt would argue with the overarching goal of beefed-up defense; however, there is a universal naiveté among the freshly elected that Congress will go along because the president shares the same party registration as those who control the House of Representatives and Senate.

Philosophically, the White House and Republicans on Capitol Hill are on the same page: cut spending, reform the tax code, and get the economy roaring. However, whether and how to achieve those things is the issue, and when it comes to spending, whose ox is gored when budgets are cut is the overriding concern.

The federal budget process is arcane, complex, and illogical because it is first and foremost political. President Donald Trump’s blueprint, which highlighted cuts to all the right political targets (e.g., the Environmental Protection Agency), is particularly naïve because it is clearly the work of a White House that believes the federal government can be financed like a business.

It is unclear whether the Trump administration yet understands or cares about the reality of the Capitol Hill budget/spending game. The president’s numbers are dramatic, but most analysts contend they are not politically realistic. Will the Pentagon see a major fiscal year (FY) 2018 spending increase? It is likely, but not at the level the president wants and certainly not at the fiscal expense of the rest of the government, at least to the degree the president recommends. Trump’s “good intentions” collide head on with elected members of Congress and their dedication to bring the bacon home to the folks who elected them. Senators and House members will ignore party philosophy in their zeal to protect hometown projects, particularly those to which the government has directed federal checks for years, if not decades.

Politically, the White House may need a reality check. First, Congress controls the purse strings, not the White House, and this is a power Congress will never surrender. Even if the party controlling the White House controlled 90 percent of both chambers of Congress and all elected members believe Trump can walk on water, never will an administration budget plan be embraced even by half.

Second, the administration’s budget never replaces House and Senate appropriations deliberations; the president’s spending plan is effectively seen by lawmakers as a guide to priorities rather than a serious game plan. When it comes

to money, members of Congress embrace the fact they are the elected entrusted with the key to the treasury. When the final appropriations documents are printed, they will carry a comparison among what is going to be spent in the coming fiscal year, what was spent last fiscal year, and how the new spending numbers compare to what the president “recommends.” That final White House number is pretty much irrelevant.

There are those who contend Trump and his lieutenants fully understand exactly how the budget/spending process works. They see March’s blueprint announcement slashing the Environmental Protection Agency’s budget by 31 percent and US Department of Agriculture’s (USDA’s) budget by just less than 30 percent – with the resulting loss of federal jobs – and shifting those savings to the Department of Defense as just a bit more campaign rhetoric. The document gives physical proof Trump is fulfilling a campaign promise.

However, those industries that have successfully won big pots of money for their parochial projects over the years are nervous and the media is fanning those flames of anxiety. The media is afraid moderation will prevail and its portrayal of the Trump administration as leaping to the armaments side of the guns-versus-butter debate will evaporate. Those who have won the spending battles over time are afraid their programs will be defunded or, at the least, underfunded. At the same time, withholding funding is the easiest way to block an unwanted or competing federal project.

The Trump White House has yet to actually propose a formal detailed FY 2018 budget to Congress, which was due to be sent at the end of May but will more likely be June. When it does publish, bind, and ship to the appropriations committees, it should appear even more ambitious than the blueprint would imply.

The White House has a tripartite goal: cut overall spending, with particularly deep cuts in means-tested entitlement spending (e.g., food stamps, nutrition programs, etc.); use this spending cut to jump-start economic growth through investment beyond the mediocre one to two percent annual rate of the last several years; and then successfully balance the federal budget over the next decade.

Spending cuts cannot do it alone; there will also need to be comprehensive federal tax reform, at least on the corporate side, including the closing of loopholes, repatriation of overseas profits, and so on – all moves estimated to generate \$1 trillion-plus over 10 years. If all goes well – and it never does in these things – the White House formula is assumed to generate over \$2 trillion in additional tax revenues over the next 10 years.

Evidence the Trump budget scenario is more wishful thinking than reality is the recently enacted \$1.1-trillion omnibus spending package covering the remaining five months of FY 2017. Almost none of the White House priorities were included in that package. This is more likely because to get

bogged down in policy debate would have forced a GOP-controlled Congress to shut down the federal government, or at the very least that part which relies on discretionary spending. Democrats would have been dancing in the halls as they pointed at Republican insensitivity and ineffectiveness.

The Trump budget plan also assumes that if everyone is equally feeling the pain of lost federal dollars, then it must be a good thing, as in no one can cry too loudly if all feel the same degree of discomfort. However, this is the lazy politician's approach to budgeting. Instead of using a meat cleaver to cut spending, more attention should be paid to surgical reductions so as not to lose programs or slow progress in existing programs just to claim victory on the spending front.

USDA's Market Access Program (MAP) and Foreign Market Development (FMD) program – so-called “cooperator programs,” both of which benefit rendering's overseas marketing – are good examples of how ill-advised cuts in spending can result in much broader losses overall. If these programs disappeared, millions in gained domestic and overseas economic benefit would be lost, along with about a quarter of a million jobs.

These market development programs are perennial targets for budget hawks, mainly because they are misunderstood or not understood at all. Lawmakers over time have gone after MAP and FMD funding reduction or death because these programs are incorrectly viewed as benefiting rich private companies rather than broad industry.

Federal funding for MAP has not increased since the 2002 farm bill and now sits at \$200 million annually; funding for the FMD program was last increased in the 2002 farm bill to

\$34.5 million a year. Every fiscal year, the National Renderers Association and various other groups fight as a coalition to just preserve their relatively small share of USDA's spending pie.

MAP and FMD are successful partnership market development programs, meaning industry puts up dollars matched by USDA with the goal being to build exports for qualifying products and commodities. Under MAP and FMD, run by USDA's Foreign Agricultural Service, private sector groups contributed an estimated \$468.7 million in 2014 to international market development and promotion. MAP/FMD funding generated a 1977-2014 return on investment of \$28.30 in export gains for every additional \$1 spent on foreign market development, returned an average annual increase in farm net income of \$2.1 billion in 2002-2014, and created 239,800 new full- and part-time jobs between 2002-2014.

The FY 2018 appropriations process has begun but it is likely not going to yield much in the way of major cuts, though there will be an effort to increase defense spending. Monies will be shifted but overall the picture will remain much the same – unless one or both of the following occur.

If the House of Representatives is successful in getting some form of tax reform across the goal line and the Senate is willing to go along, then it is a game changer. Right now, insiders speculate the notion of comprehensive tax reform – both personal and corporate tax code reinvention – is unlikely because it is just too heavy a political lift. However, while Trump wants the current 35 percent corporate tax rate cut to 15 percent and House leadership keeps pointing at a new

Continued on page 27



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California Renderers Review Grease Program

California renderers have a new champion in their corner with the hiring of Paula Batarseh as the new chief of the California Department of Food and Agriculture's (CDFA's) Meat, Poultry, and Egg Safety (MPES) Branch. As a chemical engineer who spent the past 28 years at the California Department of Toxic Substances, Batarseh brings a wealth of environmental experience to her new position and is eager to work with renderers, as she explained at the Rendering Industry Advisory Board (RIAB) meeting in late March.

"I am humbled to be working with this group to bring rendering matters to the attention of the agriculture secretary," she commented. RIAB Chairman Michael Koewler, Sacramento Rendering Company, served on the committee that interviewed applicants and said Batarseh is a "very qualified candidate."

During her nearly three decades at the state's toxic substances department, Batarseh, who has a chemical engineering degree from the University of Toronto, Canada, has spent over 20 years as a supervisor or manager, including as an assistant deputy director and branch manager. She has held positions responsible for new technology assessment, facility evaluation, source reduction, site mitigation, permitting and enforcement, Safer Consumer Product and Green Energy program implementation, and Hazardous Waste Program management.

At the suggestion of the RIAB, CDFA staff performed additional inedible kitchen grease (IKG) transport manifest audits to ensure compliance with the state's program. Investigator Paul SanGregorio noted that audits he performed last June on nine companies showed a 55 percent compliance rate primarily due to misinformation. After training the companies, follow-up audits conducted this March showed a 99 percent compliance rate.

"The training does work, but it's real extensive and hands-on," he stated. "I found many companies were trying to reinvent the wheel instead of using simple CDFA forms."



New MPES Branch chief Paula Batarseh.

CDFA investigators Louie Lucero and Rett Dunn had similar experiences during their audits, with many companies not understanding the manifest concept. The most common error found was incorrect mathematical calculations/formulas to obtain total IKG collected from the generator and received at the disposal site. RIAB members said the state's IKG manifest needs to be automated electronically like other information that is required by county agencies. CDFA staff will investigate accommodating that request.

Koewler spoke of the need to share the IKG program requirements with California's environmental health departments to ensure restaurants are not taking trap grease and placing it in IKG containers, an increasing problem. He noted that grease traps need to be serviced properly to protect sewer systems.

MPES acting branch chief David Schurr, who had previously served as a Food and Drug Administration inspector, reached out to the United States Department of Agriculture to verify if California facilities being inspected were licensed for inedible rendering. He found 70 companies that were not regulated by CDFA when they should have been with a sizeable share of the meat products going to anaerobic digestion. Schurr said 300 new inedible rendering permits have since been issued. In addition, California Safe Soil, which produces a liquid fertilizer and soil stimulant from food recovered from supermarkets, has now been licensed as a renderer as outside laboratory tests show the finished product is pathogen free.

Koewler cautioned CDFA staff on licensing "out of the mainstream" rendering companies that could shift their end product to animal feed if current markets or demand changes or wanes. California State Veterinarian Dr. Annette Jones said while the department supports and prefers traditional rendering for the disposal of meat waste, it has to take a technology-neutral stance provided the end product meets state regulations of being pathogen free. **R**

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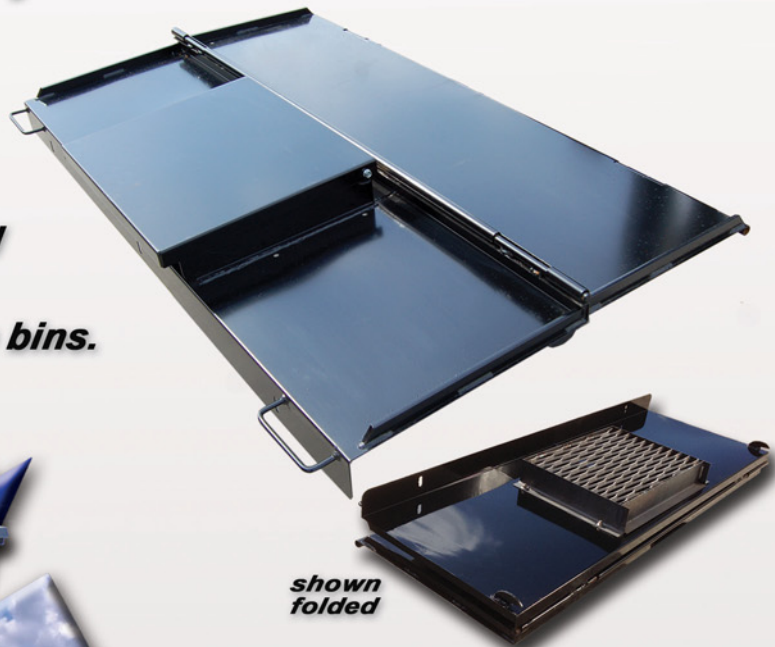
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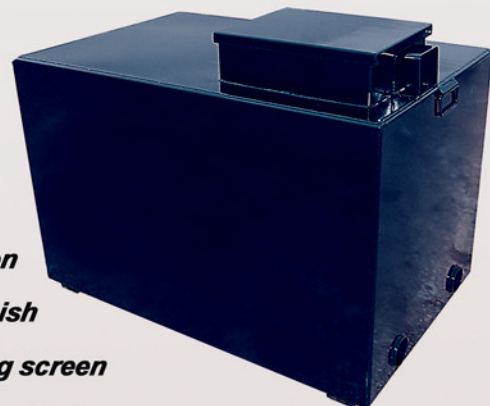
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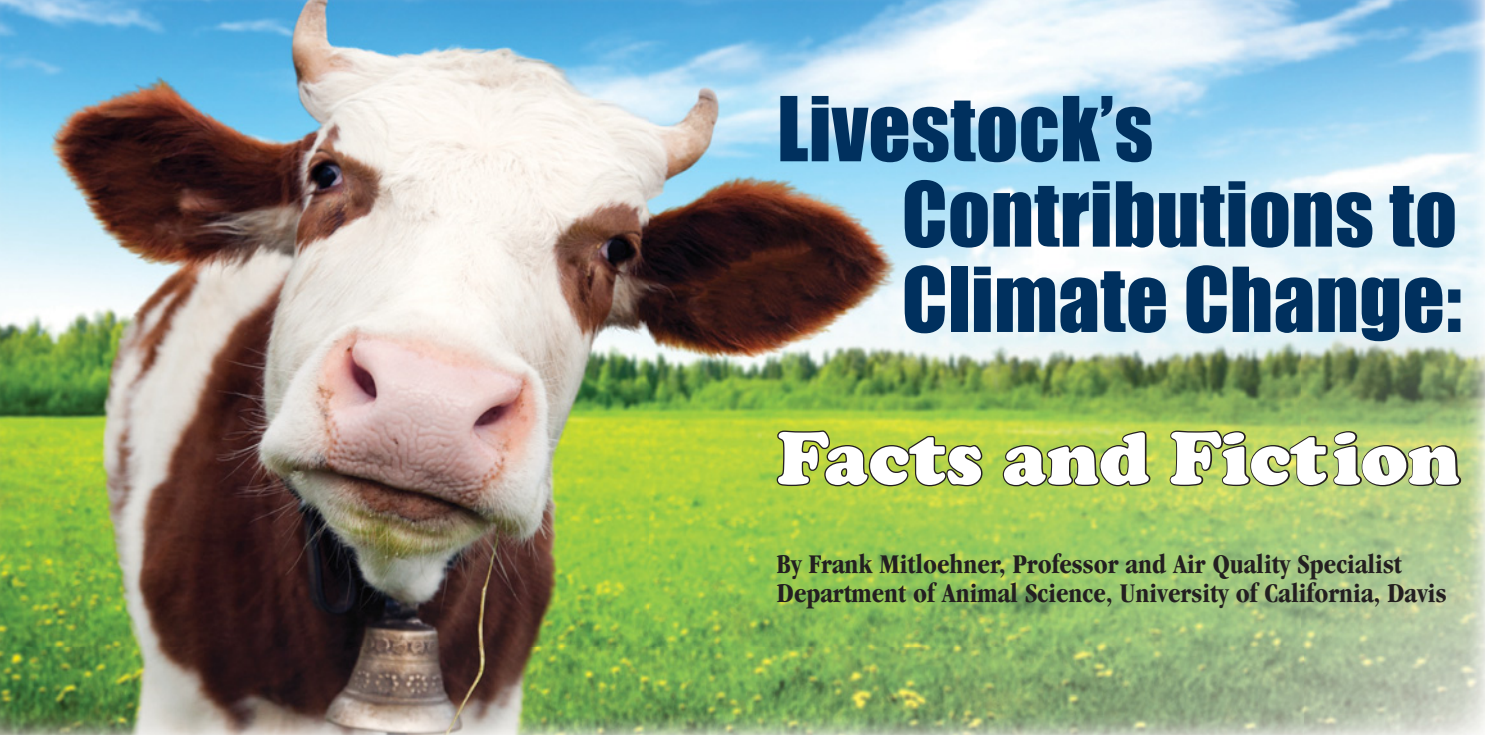
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Livestock's Contributions to Climate Change:

Facts and Fiction

By Frank Mitloehner, Professor and Air Quality Specialist
Department of Animal Science, University of California, Davis

Editor's note – The following is a white paper defining the role animal agriculture and other sectors of society play in their respective contribution of greenhouse gases as the societal concerns grow to seek a sustainable global future.

As the November 2015 Global Climate Change Conference COP21 concluded in Paris, 196 countries reached an agreement on the reduction of fossil fuel use and emissions in the production and consumption of energy, even to the extent of potentially phasing out fossil fuels entirely. Both globally and in the United States (US), energy production and use as well as transportation are the largest anthropogenic contributors of greenhouse gases (GHGs), which are believed to drive climate change. While there is scientific consensus regarding the relative importance of fossil fuel use, anti-animal agriculture advocates portray the idea that livestock is to blame for the lion's share of the contributions to total GHG emissions.

One argument often made is US livestock GHG emissions from cows, pigs, sheep, and chickens are comparable to all transportation sectors from sources such as cars, trucks,

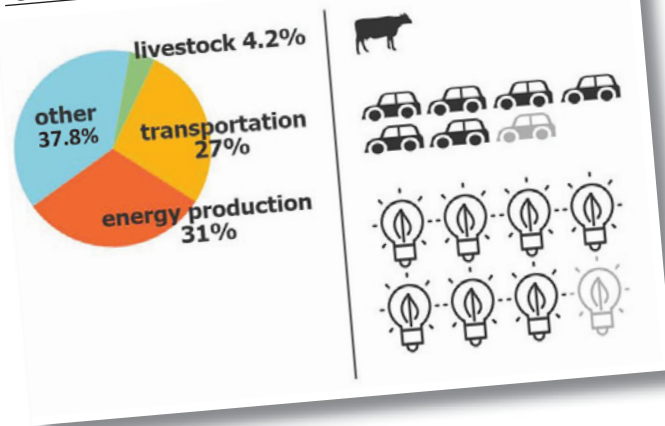
planes, trains, and so on. The argument suggests the solution of limiting meat consumption, starting with "Meatless Mondays," will show a significant impact on total emissions.

When divorcing political fiction from scientific facts about GHGs from all sectors of society, one finds a different picture. Leading scientists throughout the United States, as well as the US Environmental Protection Agency (EPA), have quantified the impacts of livestock production in this country, which accounts for 4.2 percent of all GHG emissions, far from the 18 to 51 percent range that advocates often cite.^{1,2} Comparing the 4.2 percent GHG contribution from livestock to the 27 percent from the transportation sector, or 31 percent from the energy sector in the United States, brings all the contributors to GHGs into perspective. Rightfully so, the attention at COP21 was focused on the combined sectors consuming fossil fuels as they contribute to more than half of all GHGs in the United States.

Breaking down the 4.2 percent EPA figure for livestock by animal species shows the following contributors: beef cattle 2.20 percent, dairy cattle 1.37 percent, swine 0.47 percent, poultry 0.08 percent, sheep 0.03 percent, goats 0.01 percent, and other (e.g., horses, etc.) 0.04 percent. It is sometimes difficult to put these percentages in perspective; however, if all Americans practiced Meatless Mondays, national GHG emissions would only be reduced by 0.6 percent per year. A beefless Monday per week would cut total emissions by 0.3 percent annually. One certainly cannot neglect emissions from the livestock sector, but to compare them to the main emission sources is going down the wrong path to solutions, namely to significantly reduce society's anthropogenic carbon footprint to reduce climate change.

In spite of the relatively low contributions to total GHG emissions, the US livestock sector has shown considerable progress during the last six-plus decades, and commitment into the future, to continually reduce its environmental footprint while providing food security at home and abroad. These environmental improvements have been the result of continued research and advances in animal genetics, precision nutrition, as well as animal care and health. Encouraging

Livestock production accounts for only 4.2% of all greenhouse gas emissions in the United States



practices such as recycling and rendering of meat industry by-products into nutritional animal food ingredients improve the sustainability of both the meat production industry and the users of the by-products.³ Alternative uses or disposal of meat industry by-products may be less environmentally impactful than landfills but result in more GHG production than feed ingredient use.⁴ As part of the solution to food waste, which will also improve global sustainability, food waste and food production by-products should be put to the highest use possible, according to the EPA Food Recovery Hierarchy.⁵

US Dairy and Beef Production Continuous Improvement

Globally, the US livestock sector has the relatively lowest carbon footprint per unit of livestock product produced globally (i.e., meat, milk, or egg). The reason for this achievement largely lies in the production efficiencies of these commodities whereby fewer animals are needed to produce a given quantity of animal protein food, as the following milk production example demonstrates. The average dairy cow in the United States produces 22,248 pounds (lbs.) of milk per cow per year. In comparison, the average dairy cow in Mexico produces 10,500 lbs. of milk per cow per year, thus requiring two-plus cows in Mexico to produce the same amount of milk as one cow in the United States. India's average annual milk production per cow is 2,500 lbs., increasing the methane and manure production by a factor of nine times compared to the US cow. As a result, the GHG production for that same amount of milk is much lower for the United States versus Mexico or India.

Production efficiency is a critical factor in sustainable animal protein production and it varies drastically by region.

Improvements in livestock production efficiencies are directly related to reductions of the environmental impact. Production efficiencies and GHG emissions are inversely related – when the one rises, the other falls.

The 2050 challenge to feeding the world is real: throughout our lifetime, the global human population will have tripled from three billion to more than nine billion people without concurrent increases of natural resources to produce more food. The natural resources of land, water, and minerals (fertilizer) necessary for agricultural production have not grown but have in fact decreased. As a result, agriculture will have to become much more efficient worldwide and follow the path US livestock production has taken in recent decades.

Accurately and Fairly Assessing Emissions

In its quest to identify a sustainable, scientific path toward fulfilling the future global food demand, the Food and Agriculture Organization (FAO) of the United Nations has formed an international partnership project to develop and adopt a “gold standard” life cycle assessment (LCA) or each livestock species and the feed sector. The

Livestock Environmental Assessment and Performance (LEAP) Partnership engaged more than 300 scientists from the world's most prestigious academic institutions in an unprecedented effort to develop a global benchmarking methodology. The first three-year phase project was finalized in December 2015 with six publicly available LCA guidelines.⁶ This globally harmonized quantification methodology will not only allow the accurate measurement by livestock species and production regions across the globe today, but will also identify opportunities for improvement and the ability to measure that progress in each region going forward.

Summary

Addressing the 2050 challenge of supplying food to a drastically growing human population can sustainably be achieved through intensification of livestock production. Indeed, intensification provides large opportunities for climate change mitigation and can reduce associated land use changes such as deforestation. Production efficiencies reduce environmental pollution per unit of product.

The US livestock, poultry, and feed industries are some of the most efficient and lowest environmental impact food production systems in the world. The research, technologies, and best practices that have been developed and implemented over time in the United States can also be shared with other production regions around the world. It is important to understand that all regions have unique demands and abilities but the advances made in the US agriculture and food system can be adapted to find regional solutions. These significant

environmental advances and benefits are in addition to the well-documented human health and developmental value of incorporating animal protein in the diets of the growing population.

The North American livestock sector is committed to continuous improvement of its environmental impact and to doing its part in transferring knowledge, technologies, and best practices to enhance global environmental livestock impact by region. Now is the time to end the rhetoric and separate facts from fiction around the numerous sectors that contribute emissions and to identify solutions for the global food supply that will allow a reduced impact on the planet and its resources.

R

Table 1. US dairy and beef production continuous improvement

	1950	2016	% Change
Total dairy cows	22 million	9 million	-59
Milk production (tons)	117 million	209 million	+79
Carbon footprint		1/3 that of 1950	
	1970	2015	
Total beef cattle (head)	140 million	90 million	-36
Beef production (tons)	24 million	24 million	

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International Markets, Biofuels on NRA Radar Screen

By Tina Caparella

While business matters were discussed at the National Renderers Association (NRA) spring meeting held in late April in Chicago, Illinois, export markets and the United States (US) biodiesel industry appeared to be at the center of attention.

Members of NRA's International Market Development Committee (IMDC) heard about the challenges and opportunities in various parts of the world, beginning with Peng Li, NRA's regional director for Asia. China's total feed production in 2016 was 187.2 million metric tons, with 75.5 million metric tons for swine and 16.4 million metric tons for aquaculture. Li noted that the pet food industry in China has grown to 900,000 metric tons.

Soap production in China, at around one million metric tons annually, has been stable the past few years, importing 40,930 metric tons of tallow from New Zealand and 28,000 metric tons of tallow from Australia in 2016. The soap industry also imported more than 3.3 million metric tons of palm oil from Malaysia and Indonesia in the first 10 months of 2016, a 34 percent decrease compared to the same time frame in 2015. Poultry and feather meal from the United States is exempt from a Chinese ban that has been in place for Australian products since 2012, although US renderers are seeing increased competition from European and Brazilian meals at low prices. US poultry fat, however, has been banned in China since January 2015. NRA is currently lobbying for market access.

Imports of US tallow to China for industrial uses were once again allowed beginning in 2016 after years of closure. Li stated that the country's pet food and human food industries need tallow but there is currently a lack of registered US facilities and stringent regulations on importers, pipelines, storage tanks, and final users. NRA will be assisting with the registration of

US rendering company members who are looking to export tallow to China.

Li described Indonesia as the most important overseas market for US animal proteins as it produced 18.8 million metric tons of feed last year, of which 1.6 million metric tons was aquafeed. NRA is working on border issues in other Asian countries such as Taiwan – which currently only allows US feather meal, tallow, and porcine plasma imports – Sri Lanka, Vietnam, Thailand, the Philippines, and Malaysia.

NRA regional director German Davalos focused on the Latin American market, which imported 552,000 metric tons of US rendered products in 2016. Mexico was the largest importer at 413,000 metric tons, although down from 561,000 metric tons in 2015 and 467,000 metric tons in 2014. US rendered fat exports to Mexico saw a significant drop last year, from 456,000 metric tons in 2015 to 314,000 metric tons in 2016. Central and South America also imported less US rendered fats due to a switch to lower-priced vegetable oils.

As for the 165,000 metric tons of US animal proteins exported to the region in 2016, about 100,000 metric tons went to Mexico, down slightly from 2015. South America cut its imports by over half, from 97,000 metric tons in 2015 to 45,000 metric tons last year while Central America doubled its imports from 10,000 metric tons in 2015 to 20,000 metric tons in 2016.

"In order to increase animal protein exports into Mexico, we need to open the market for ruminant meat and bone meal," Davalos commented. He noted that the country's poultry industry is using porcine protein meal in feed formulations but cannot obtain enough to meet demand.

US animal protein demand in Chile and Peru dropped considerably due to challenging conditions for salmon production; however, Skretting, a global supplier of aquaculture feed, wants to expand its "fish meal free" diets for salmon to other farmed fish species. Worldwide, the aquaculture industry uses 40 million metric tons of aquafeed annually, a number that will double by 2030, according to Davalos.

The pet care industry in Latin America grew six percent from 2011 to 2016, with the premium pet food segment growing at a higher rate due to the humanization of pets in the region. Davalos said Mexico produces nearly one million metric tons of pet food per year, imports 50,000 metric tons, primarily premium products, and exports 25,000 metric tons. NRA is also working on market access for ruminant meat and bone meal in other regions of Latin America.

Bruce Ross, Ross Gordon Consultants, shared recent activities in Europe, including the continued debate over US used cooking oil exports to the European Union (EU) and renewable energy policy. While the EU continues to import used cooking oil from the United States for technical purposes, the European Commission is once again seeking to regulate this



Working on international markets for the US and Canadian rendering industries is a team effort by (from left) Kent Swisher, NRA; Bob Williams, Chris Jacquette, and Dr. Morganne Morrow, all from the US Department of Agriculture; Mike Gilbert, Darling Ingredients Inc.; Rob Jones, West Coast Reduction Ltd.; and German Davalos, Peng Li, and Bruce Ross, NRA.

trade. Ross mentioned that the goal of the new EU renewable energy directive is to ban crop-based oils for biofuels. However, it is very likely there will not be EU-level targets for biofuel use beyond 2020 when the current mandates end.

Along with international challenges, US renderers are keeping an eye on the biodiesel and renewable diesel markets at home. NRA's Biofuels Committee Chairman Doug Smith, Baker Commodities, reminded all that the \$1-per-gallon blender's tax credit for biodiesel and renewable diesel expired at the end of 2016 but the National Biodiesel Board (NBB) supports introduction of new legislation to not only reinstate the credit but to change it to a producer's credit (see Biofuels Bulletin on page 20). This will help deter the increasing amount of imported biodiesel that is receiving a tax benefit originally intended for domestic production. Rendered fats and oils account for about 30 percent of all feedstocks used in biodiesel and renewable diesel production.

"It is a high priority for our industry to support biofuels," commented NRA President Nancy Foster. Shelby Neel, director of state governmental affairs at NBB, informed the committee that state markets currently drive about one-third of US biodiesel consumption annually, led by California and its Low Carbon Fuel Standard.

"The left and right coasts are where the action and growth is currently," he noted. "Midwest policies are about economic development while the West Coast is about environment." In California, rendered fats and oils are preferred feedstocks due to their low carbon intensity. In 2016, nearly 400 million gallons of biomass-based diesel was consumed in California, about two percent of the total diesel fuel volume. **R**

Export Markets Elude Canadian Renderers

Canadian renderers continue to struggle with export markets for their products. Currently, the Philippines is the only country importing meat and bone meal from Canada at nearly \$250 less per metric ton than meal from the United States (US). Although the Canadian Food Inspection Agency is working with various countries, including Vietnam and Bangladesh, to expand rendered product exports, it is "tough" and "painful" at times, according to several Canadian renderers. There is no hope of Indonesia, once a thriving export market for Canadian rendered products, reopening its borders at this time.

Another obstacle for Canadian renderers is the finalization of a small ruminant rule in the United States that was on hold until late April due to the new presidential administration. The proposed rule was published last July and would allow the importation of tallow and used cooking oil derived from cervids, camelids, ovines, and caprines. The National Renderers Association submitted comments in September supporting the rule and is working to ensure the rule is finalized and implemented as soon as possible to avoid any further trade restrictions. US tallow and used cooking oil can currently be exported to Canada, but the same product produced in Canada, even if it contains US product, cannot be imported into the United States. **R**



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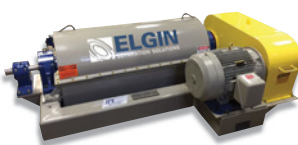
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APPI Membership: Continuous Improvement

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

APPI's mission is to assist member companies in manufacturing safe products. The *Rendering Code of Practice* corresponds very closely to the biosecurity initiatives taking place throughout the entire food chain and furthers the concept of safe feed – healthy livestock – safe food – healthy people. With continued intense scrutiny on all feed ingredients, the development of the *Code of Practice* years ago by renderers shows great foresight. The leading edge of the rendering industry is renderers who participate in this *Code of Practice*, with a list of participants at www.nationalrenderers.org/biosecurity-appi. This certification includes independent

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

- better ensure compliance with the Food Safety Modernization Act;
- assure customers that a renderer is a verified safe supplier;
- offer a single audit for recognition by two well-known programs;
- help employees take pride in their work; and
- identify opportunities for continuous improvement.

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

The following 189 plants made a significant commitment to APPI and its testing program in 2016. They are the foundation for safe rendered feed products in the future.

3D Corporate Solutions

Danville, AR (Pet Solutions)
Joplin, MO (Protein Solutions)

AB Foods LLC

Toppenish, WA

American Proteins Inc.

Alma, GA
Cumming, GA
Cuthbert, GA
Hanceville, AL (plant A)
Hanceville, AL (plant B)

Ampro Products Inc.

Concordia, MO
Cumming, GA
Cuthbert, GA
Dawsonville, GA
Gainesville, GA
Muscatine, IA
Pickensville, AL

Baker Commodities Inc.

Kerman, CA
Los Angeles, CA
North Billerica, MA
Phoenix, AZ
Rochester, NY
Seattle, WA

BHT Resources

Bessemer, AL

Boyer Valley Co.

Arion, IA

Cargill Meat Solutions

Dodge City, KS
Friona, TX
Ft. Morgan, CO
Highriver, AB, Canada
Schuyler, NE
Wyalusing, PA

Clemens Food Group

Hatfield, PA

Clougherty Packing

Vernon, CA

Coastal Protein

Godwin, NC

DaPro LLC

Huron, SD

Darling Ingredients Inc.

Bastrop, TX
Berlin, WI
Blue Earth, MN
Butler, KY
Clinton, IA
Coldwater, MI
Collinsville, OK
Crows Landing, CA
Dallas, TX
Denver, CO
Des Moines, IA
East Dublin, GA
Ellenwood, GA
Fairfax, MO

Darling Ingredients Inc. (continued)

Fresno, CA
Houston, TX
Jackson, MS
Kansas City, KS
Kansas City, KS (blending)
Kuna, ID
Lexington, NE
Los Angeles, CA
Lynn Center, IL
Mason City, IL
National Stock Yards, IL
Newark, NJ
Newberry, IN
Omaha, NE
Omaha, NE (blending)
Pocahontas, AR*
Russellville, KY
San Francisco, CA
Sioux City, IA
Starke, FL
Tacoma, WA
Tampa, FL
Union City, TN
Wahoo, NE
Wichita, KS
Winesburg, OH*

Continued on page 16



Rendered Products Are Safe.

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

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



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

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

Farmers Union Industries LLC (Central Bi-Products)

Long Prairie, MN
Redwood Falls, MN

Fieldale Farms Corp.

Cornelia, GA
Eastanollee, GA

Foster Farms

Farmerville, LA
Livingston, CA

G.A. Wintzer & Son Co.

Wapakoneta, OH

Hahn & Phillips Grease

Marshall, MO

Harris Ranch Beef Co.

Selma, CA

H.J. Baker & Bro. Inc.

Sanford, NC*

Hormel Food Corp.

Austin, MN
Fremont, NE

Indiana Packers Corp.

Delphi, IN

Iowa Protein Solutions

Estherville, IA

Island Commodities Inc.

Kapolei, HI

JBS

Beardstown, IL (JBS Swift Pork Co.)
Brooks, AB, Canada
Cactus, TX (JBS Swift & Co.)
Elizabethville, PA
(JBS Souderton Inc.)
Elroy, PA (JBS Souderton Inc.)
Grand Island, NE (JBS Swift & Co.)
Greeley, CO (JBS Swift & Co.)
Green Bay, WI (JBS Swift & Co.)
Hyrum, UT (JBS Swift & Co.)
Marshalltown, IA (JBS Swift & Co.)
Omaha, NE (JBS Swift & Co.)
Ottumwa, IA (JBS Swift Meat Co.)
Seaford, DE (JBS Souderton Inc.)
Tolleson, AZ (JBS Swift & Co.)
Worthington, MN (JBS Swift & Co.)

John Kuhni Sons Inc.

Levan, UT

Keystone Protein Company

Fredericksburg, PA

Kruger Commodities Inc.

Hamilton, MI
Tama, IA

Maple Lodge Farms

Brampton, ON, Canada

Mason City By-Products

Mason City, IA

Mendota Agri-Products Inc.

Mendota, IL*

Mid-South Milling Co. Inc.

Kansas City, KS
Memphis, TN

Mountain View Rendering

Edinburg, VA

Mountaire Farms of Delaware Inc.

Millsboro, DE

National Beef Packing Co. LLC

Dodge City, KS
Liberal, KS

NF Protein

Sioux City, IA
(The Andersons Nutra Flo)

Northern Alberta Processing

Edmonton, AB, Canada

Nutri Feeds Inc.

Hereford, TX

Nutrimax Inc.

Laurinburg, NC

Pilgrim's Pride Corp.

Mt. Pleasant, TX
Moorefield, WV
Sumter, SC
Timberville, VA

Protein Products

Sunflower, MS

Rothsay

Dundas, ON, Canada
Hickson, ON, Canada
Moorefield, ON, Canada
Truro, NS, Canada
Winnipeg, MB, Canada

Sacramento Rendering Co.

Sacramento, CA

Sanimax

Charney, QB, Canada
Green Bay, WI
Montreal, QB, Canada
South St. Paul, MN

S.F. Rendering Ltd.

Centreville, NS, Canada

Simmons Feed Ingredients

Southwest City, MO

Smithfield Foods Inc.

Clinton, NC
Crete, NE
Denison, IA
Milan, MO
Monmouth, IL
Smithfield, VA
Tar Heel, NC

Standard Fertilizer

Greenburg, IN

Tallowmasters LLC

Miami, FL

Tyson Foods

Amarillo, TX (Tyson Fresh Meats)
Clarksville, AR (RVAF)
Columbus Junction, IA
(Tyson Fresh Meats)

Tyson Foods (continued)

Cullman, AL (blending)
Dakota City, NE
(Tyson Fresh Meats)
Forest, MS (RVAF)
Harmony, NC (RVAF)
Hillsdale, IL (Tyson Fresh Meats)
Holcomb, KS (Tyson Fresh Meats)
Lexington, NE (Tyson Fresh Meats)
Logansport, IN
(Tyson Fresh Meats)
Madison, NE (Tyson Fresh Meats)
Perry, IA (Tyson Fresh Meats)
Pine Bluff, AR (blending)
Robards, KY (RVAF)
Scranton, AR (RVAF)
Sedalia, MO (RVAF)
Sequin, TX (RVAF)*
Storm Lake, IA
(Tyson Fresh Meats)
Temperanceville, VA (RVAF)
Texarkana, AR (RVAF)
Waterloo, IA (Tyson Fresh Meats)
Wallula, WA (Tyson Fresh Meats)

Valley Proteins Inc.

Amarillo, TX
East Earl, PA
Fayetteville, NC
Fayetteville, NC (pet food div.)
Gastonia, NC
Lewiston, NC
Linkwood, MD
Linville, VA
Rose Hill, NC
Strawberry Plains, TN
Wadesboro, NC
Ward, SC
Winchester, VA

West Coast Reduction Ltd.

Calgary, AB, Canada
Saskatoon, SK, Canada
Vancouver, BC, Canada

West Coast Rendering

Vernon, CA

Western Mass. Rendering

Southwick, MA

Wilbur Ellis Company

Gaffney, SC
Scurry, TX

*New and returning participant for 2016

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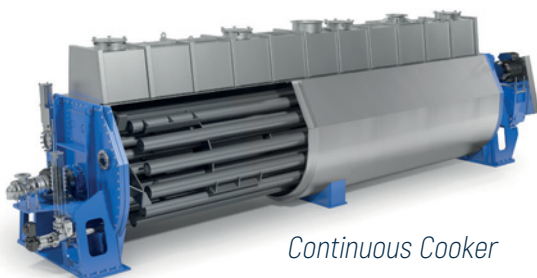
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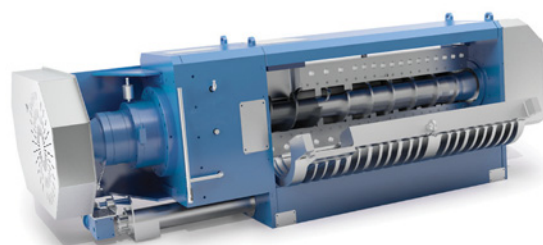
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The Power of Coalitions

One of the first meetings I attended after joining the National Renderers Association (NRA) was at the National Cattlemen's Beef Association in Washington, DC. The cattlemen and American Farm Bureau co-chair an important coalition supporting fair tax treatment for American agriculture. I had been a member of this coalition before joining NRA, representing growers. At this meeting, I was the only person representing processing companies as the rest worked for farm groups, agriculture cooperatives, and farm credit. However, we were "aggies" together, pulling in the same direction.

NRA makes for a large presence even with a small staff and conservative budget. One way this is done is by working with coalitions of like-minded allies to speak in one voice, sharing information and political intelligence, strategies, and resources. We learn about each other's industries and focus on success for our members, together.

NRA is a member of 18 coalitions on important rendering issues. These collaborations are key to implementing two important parts of NRA's mission in its 2020 Strategic Plan: to promote effective public policy, regulation, and technology; and to improve stakeholder awareness and understanding of the value of rendering.

American agriculture often cannot reach common ground about what is best for the future of the nation's food, fiber, and feed chain. Farmers, ranchers, packers, processors, retailers, marketers, lenders, brokers, exporters, and others are a patchwork of buyers, sellers, and consumers with different interests and goals.

When Congress writes a new farm bill every four or five years, there is a lot of discussion about the best role for government in agriculture. For example, how much should government help farmers through hard times due to weather, low prices, unfair foreign competition, and other things beyond their control? Row crop growers traditionally want a government safety net but livestock producers do not. Another major issue is whether government support should be linked to "doing good" for the environment, sustainability, labor, and organic/local production. These are some of the hardest fights in the farm bill. With commodity prices at their lowest in many years, watch for fireworks as Congress starts to write a new farm bill later this year.

It is a different story on many other important agricultural issues. Agriculture is more united on taxes, trade, food safety, sustainability, environmental regulations, and defending against activists. That is where coalitions come into play. They often include allies outside agriculture for more strength to influence Congress, persuade regulators, and avoid counter attacks. Coalitions help NRA leverage issues into support from allies and promote rendering to strengthen the ability to successfully operate. NRA is involved in a number of valuable coalitions and collaborations.

With animal food safety so important to the future of rendering, NRA has been a member of the Food Safety

Preventive Controls Alliance responsible for developing training to comply with the new Food Safety Modernization Act (FSMA). NRA joined the Food and Drug Administration and groups such as the Association of American Feed Control Officials (AAFCO), American Feed Industry Association (AFIA), and Pet Food Institute (PFI) to write new curriculum to train preventive control qualified individuals (PCQI) required under the law. NRA's input ensured that rendering provisions were correct and reasonable, which is critical for workable compliance with FSMA. Many PCQIs in the rendering industry have taken training seminars conducted by NRA's Animal Protein Producers Industry Committee.

AAFCO is important to the rendering industry. NRA collaborates with state feed regulators in this group to provide recommendations and technical input on issues directly affecting rendered products. NRA has worked on a model state feed bill, feed ingredient definitions, and food safety education with AAFCO members.

NRA is a member of the new U.S. Sustainability Alliance, a group of agricultural organizations working together to educate consumers about American agriculture's sustainability and commitment to conservation. The alliance's website (www.thesustainabilityalliance.us) is often viewed by customers here and abroad and features an engaging fact sheet on "U.S. Renderers – A Global Leader in Sustainability."

NRA is providing sustainability information about rendering to the Council for Agricultural Science and Technology (CAST) for their upcoming issue paper on food waste and innovative solutions. NRA belongs to CAST and supports its mission to develop and communicate science-based information to policymakers, the media, the private sector, and the public.

NRA also works on animal health regulations and policies with the United States Animal Health Association. This group represents state veterinarians, United States Department of Agriculture (USDA) and other government veterinarians, livestock groups, animal health providers, and several foreign countries.

Other science-based collaborations in which NRA participates include the Animal Agriculture Coalition that supports animal research and advocates for animal agriculture, the Food Industry Codex Coalition that works on international trading standards, and the Federation of Animal Science Societies that advocates for research investments and science in decision making. NRA is also active in both the American Meat Science Association, which represents university and processing company meat scientists, and the American Registry of Professional Animal Scientists that certifies animal scientists and provides continuing education.

Because almost 20 percent of US rendered products are exported, overseas sales are essential to rendering profitability. US companies not exporting also benefit from product disappearance offshore. NRA promotes rendered product exports with offices in Mexico City, Mexico, and Hong

Kong, China, a European trade advisor, and consultants around the world. The association also coordinates with AFIA and PFI in monthly phone calls to resolve trade problems and coordinate export promotion activities.

NRA receives about \$1.7 million each year from USDA to promote sales of rendered products overseas. The association also belongs to the Coalition to Promote U.S. Agricultural Exports that advocates for strong funding for the Market Access Program and Foreign Market Development programs that provide these grants.

NRA participates in the U.S. Food and Agriculture Dialogue for Trade, a group of over 100 US food and feed groups and companies supporting strong export trade. This is especially important given objections to international agreements and global trade by many American voters. Meetings provide an opportunity to talk with senior government decision makers, trade negotiators, and foreign government leaders and officials. NRA is participating in dialogue meetings on Capitol Hill about the importance of negotiating a new North American Free Trade Agreement (NAFTA) that expands agricultural trade, including for rendered products. The dialogue trade group's official position on the upcoming NAFTA negotiations includes NRA's recommendation that greater market access among the United States, Mexico, and Canada should include adoption of consistent standards for animal health certification that follow World Organization for Animal Health standards.

As a member of the U.S. Chamber of Commerce, NRA participates on their Environment and Agriculture Committee as well as the group's Trade Task Force. This involvement provides valuable information on legislative and regulatory issues affecting rendering as well as networking opportunities to educate about rendering.

Congress may move ahead with a major tax overhaul this year. NRA is working to keep the need for tax credits for biodiesel and renewable diesel before the ag tax coalition mentioned above. Having broad agriculture support will be critical to maintain these tax credits in the face of efforts to streamline the tax code and eliminate special treatment provisions. NRA is also a member of the

National Biodiesel Board and supports their efforts for a strong Renewable Fuel Standard and continued tax credits.

Communicating about rendering and defending the industry in a crisis are key roles of NRA. The association is a member of the Animal Agriculture Alliance and enlists their able assistance with resources and programs to counter negative news and promote the contributions of animal agriculture. NRA is also linked into the informal but effective agriculture communicator's network, a group of communications

professionals working for agricultural groups who share information about expected media coverage.

Coalitions come and go, depending on the fight that needs to be won. Some come together to prevent damage from new threats and others seize good opportunities to grow markets.

Being involved in these coalitions makes NRA more efficient and effective for its members. There is synergy and sharing of information and resources that occurs to benefit all coalition members. **R**



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California Court Ruling Protects Biodiesel

Editor's note – With this June issue of Render, we introduce a new writer for the biofuels column. Joe Gershen is president of Encore BioRenewables and has been involved with the biodiesel, renewable energy, and clean technology sectors for 16 years. He serves as vice president of the California Biodiesel Alliance and sits on the Advisory Committee for the California Energy Commission's Alternative and Renewable Fuel and Vehicle Technology Program.

On April 10, 2017, California's Fifth District Court of Appeal's much-anticipated final ruling came down in the *Poet LLC vs. California Air Resources Board* (CARB) case. The outcome was less harsh for the biodiesel industry than expected compared to a preliminary ruling previously issued by the court. Poet, a producer of ethanol and other biorefined products, filed the lawsuit in an attempt to prevent CARB from implementing its Low Carbon Fuel Standard (LCFS), which gives corn ethanol a higher carbon intensity score (which is less favorable) due to indirect land use changes. Although biodiesel is generally unrelated to corn ethanol, Poet alleged an increase in nitrogen oxide (NOx) emissions caused by biodiesel violated the California Environmental Quality Act (CEQA).

A preliminary ruling released in late March had the biofuels industry, especially biodiesel producers in California, concerned as the court indicated CARB had made errors in its environmental assessment of NOx emissions from biodiesel. Based on the preliminary ruling, it appeared biodiesel could be severed from California's LCFS program while CARB took any necessary corrective actions.

In its final ruling, the court found that CARB was in violation of CEQA with respect to its assessment of NOx emissions from biodiesel when it approved the re-adopted LCFS regulations. However, rather than remove biodiesel from the program as was anticipated, the court ruled that the regulations could remain intact in the interest of protecting the environment while CARB took the proper actions to comply with CEQA. The court recognized the benefits of biodiesel, including reducing greenhouse gas emissions and criteria pollutant emissions.

If CARB does not take the necessary corrective actions by the end of 2017, then LCFS carbon reduction targets for the alternative diesel fuel category will be held at 2017 levels until corrective actions are complete. Once that requirement is met, however, the program will be back on track. Meanwhile, since LCFS credits are generic, biodiesel can continue to be used for compliance in all categories, not just diesel.

Biodiesel Antidumping and Countervailing Duties Favored

In late March, the National Biodiesel Board (NBB) filed an antidumping and countervailing duty petition with the United States (US) Department of Commerce and the US International

Trade Commission (ITC) claiming that Argentine and Indonesian companies are in violation of trade laws by dumping subsidized biodiesel on the US market. Three weeks later, ITC launched an investigation into imports of biodiesel from these two countries for possible dumping and subsidization.

On May 5, ITC determined there is "reasonable indication" that the US biodiesel industry has been "materially injured" by imports of biodiesel from Argentina and Indonesia that are allegedly subsidized and sold in the United States at less than fair value. The next step is for the Department of Commerce to conduct its investigation and release preliminary countervailing and antidumping duty determinations, which are expected on or about June 16, 2017, and August 30, 2017, respectively.

"The National Biodiesel Board and US biodiesel industry are committed to fair trade, and we support the right of producers and workers to compete on a level playing field," said Donnell Rehagen, NBB chief executive officer. "This is a simple case where companies in Argentina and Indonesia are getting advantages that cheat US trade laws and are counter to fair competition. NBB is involved because US biodiesel production, which currently supports more than 50,000 American jobs, is being put at risk by unfair market practices."

Biodiesel imports from Argentina and Indonesia surged by 464 percent from 2014 to 2016. That growth has taken 18.3 percentage points of market share from US manufacturers.

"The resulting imbalance caused by unfair trade practices is suffocating US biodiesel producers," Rehagen explained. "Our goal is to create a level playing field to give markets, consumers, and retailers access to the benefits of true and fair competition."

Based on NBB's review, Argentine and Indonesian producers are dumping their biodiesel in the United States by selling at prices that are substantially below their cost of production. This is reflected in the petition's alleged dumping margins of 23.3 percent for Argentina and 34 percent for Indonesia. The petition also alleges illegal subsidies based on numerous government programs in those countries.

This is not the first time that Argentine and Indonesian biodiesel producers have been charged with violating international trade laws. In 2013, the European Union imposed duties anywhere from 41.9 to 49.2 percent on Argentina and 8.8 to 23.3 percent on Indonesia. Last year, Peru imposed both antidumping and countervailing duties on Argentine biodiesel.

The United States represented 90 percent of Argentina's biodiesel exports last year. The NBB petition and subsequent government investigation have already had a chilling effect on the Argentine biodiesel industry, bringing US exports to a standstill. Only cargos that were part of deals agreed to prior to these announcements are being loaded. Due to a lapse in the dollar-per-gallon blender's federal tax credit at the end of

2016, no new export deals are being discussed. A similar effect can be expected in Indonesia.

A drop in imports from Argentina and Indonesia would be a boost to the US biodiesel industry, which could see a spike in demand of hundreds of millions of gallons per year for domestic producers.

Legislation Introduced to Change Biodiesel Tax Credit

US Senator Maria Cantwell (D-WA), ranking member on the Senate Energy and Natural Resources Committee, Senator Chuck Grassley (R-IA), and 14 other senators have introduced a bipartisan tax credit bill that would convert the expired blender's tax credit for biodiesel and renewable diesel into a dollar-per-gallon producer's tax credit for these fuels produced in the United States as well as extend the new policy for three years. The *American Renewable Fuel and Job Creation Act* also provides an additional 10-cent-per-gallon credit for small US biodiesel producers. A similar bill was introduced in the US House of Representatives, led by Representatives Kristi Noem (R-SD) and Bill Pascrell (D-NJ). The switch ensures the tax credit incentivizes domestic production and that US taxpayers are not subsidizing imported fuel.

Biofuel imports from Argentina, Indonesia, Singapore, the European Union, South Korea, and others are projected to exceed 1.8 billion gallons in 2016 and 2017 combined. In many cases, imported biodiesel benefits both from the existing US

tax credit and additional foreign subsidies, making it difficult for American biodiesel facilities to compete. In 2015 alone, the US Department of Treasury spent over \$600 million on tax credits for imported biodiesel and renewable diesel.

"The biodiesel tax credit already has a sterling track record of reducing emissions and greening our economy, removing the equivalent of 16 million cars from the road," said Cantwell.

"US tax policy should support US products and US jobs," Grassley added.

US taxpayer dollars and energy policies are typically aimed at incentivizing domestic production, not foreign production. The current structure of the biodiesel tax incentive as a blender's credit allows foreign producers to access the credit if their fuel is blended in the United States. This tax reform would not block imported biodiesel from entering the US market; in fact, significant imports would likely continue coming into the United States and receiving incentives under the US Renewable Fuel Standard and California's Low Carbon Fuel Standard.

Co-sponsors on the Cantwell/Grassley bill are Senators Pat Roberts (R-KS), Mazie Hirono (D-HI), Roy Blunt (R-MO), Sheldon Whitehouse (D-RI), Joni Ernst (R-IA), Heidi Heitkamp (D-ND), John Thune (R-SD), Tom Udall (D-NM), Martin Heinrich (D-NM), Jeanne Shaheen (D-NH), Amy Klobuchar (D-MN), Al Franken (D-MN), Joe Donnelly (D-IN), and Patty Murray (R-WA).

Consumers are not expected to be impacted by this modification as the credit value is anticipated to be passed

Continued on page 22

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through to the blenders and ultimately to consumers. The US biodiesel industry has about one billion gallons of unutilized annual production capacity and access to affordable feedstocks to meet the demand of US consumers.

Proposed RFS to White House for Review

In mid-May, the Environmental Protection Agency (EPA) sent its proposed draft rule establishing renewable volume obligations (RVOs) under the Renewable Fuel Standard (RFS) for 2018 and 2019 to the Office of Management and Budget (OMB) for review. Part of the White House, OMB has the final say on this important rule for biodiesel producers and renderers. The regulatory proposal recommends RVOs for 2018 along with RVOs for biomass-based diesel in 2019. EPA administers the volume obligations for use of renewable fuels, including biodiesel and renewable diesel. The agency said it is on track to issue the proposed RFS rule in June, which means final standards could be issued in November.

Renderers provided 30 percent of the feedstock for biodiesel production in the United States in 2016. Yellow grease accounted for 16 percent and animal fats 14 percent last year.

The National Renderers Association (NRA) recognizes this important and growing market for rendered fats and used

cooking oil, and has supported annual increases in the RFS. The program has helped the relatively young biomass-based diesel industry expand successfully in recent years. NRA is communicating the importance of high RFS levels under the expected draft rule to the administration. The association will also submit regulatory comments in support of a strong RFS for both biodiesel and renewable diesel after the proposed rule is made public.

Singapore Airlines Begins Using Biofuel from UCO

Singapore Airlines began operating 12 biofuel-powered flights between San Francisco, California, and Singapore on May 1, 2017, for a three-month period. The flights will be powered by a combination of hydro-processed esters and fatty acids, a sustainable biofuel produced from used cooking oil (UCO) and conventional jet fuel. The biofuel is produced by AltAir Fuels and will be supplied and delivered to San Francisco International Airport by SkyNRG in collaboration with North American Fuel Corporation, a wholly owned subsidiary of China Aviation Oil (Singapore), and EPIC Fuels.

According to the International Air Transport Association, sustainable biofuel is a promising technological solution that will reduce the airline industry's carbon emissions. It has been certified safe for commercial aviation since 2011 and has been used by airlines around the world.

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Biofuel Fraudsters Face Justice

Malek Jalal, the 52-year-old owner of a New Jersey feedstock company, was sentenced in April for his role in a scheme that generated over \$7 million in fraudulent Environmental Protection Agency (EPA) renewable identification numbers (RINs) and tax credits connected to the production of biodiesel and his subsequent attempts to obstruct a grand jury investigation. According to his plea, Jalal, who owned Unity Fuels of Newark, New Jersey, engaged in a scheme with other co-conspirators to fraudulently claim RINs and tax credits multiple times on the same fuel. He did this by buying fuel from a New York-based company, blending it with other materials, and selling it back to the same New York-based company.

Jalal also admitted to obstruction of justice. According to his plea, he knowingly modified and destroyed records after receiving a grand jury subpoena from the Southern District of Ohio. Jalal also directed an employee of Unity Fuels to fabricate false records that were provided to the grand jury in an attempt to hide the fraud scheme.

In a separate case, a Pennsylvania biofuel producer and two of its officers have been indicted on conspiracy and false statement charges for participating in a scheme that generated over \$10 million in RIN credits at Keystone Biofuels Inc., a company that purported to produce and sell biodiesel for use as transportation fuel.

Ben Wooton, 52, of Enola, Pennsylvania, Race Miner, 48, of Buena Vista, Colorado, and Keystone Biofuels were indicted by a grand jury in Harrisburg, Pennsylvania. Wooton, serving as

president, and Miner, serving as chief executive officer, were co-owners of Keystone Biofuels located in Shiremanstown and later in Camp Hill, Pennsylvania. Both are alleged to have participated in a scheme with other co-conspirators to fraudulently claim RIN credits on non-qualifying renewable fuel. The grand jury alleges that the fuel produced at Keystone did not meet ASTM International standards, which is required in order to qualify for RIN generation, and was placed into commerce despite being "off-spec." The conspirators also allegedly generated fraudulent documentation, manipulated samples sent to laboratories for testing, and made false entries into an EPA tracking system in violation of the Clean Air Act as part of their scheme.

US Businesses Urge President to Remain in Paris Agreement

Major companies across the United States (US) are urging President Donald Trump to keep the country in the Paris Agreement on climate change. In a letter to the president organized by the Center for Climate and Energy Solutions, 16 companies stated that continued US participation in the agreement would help them manage rising climate risks and compete in the growing global clean energy markets.

Signatories to the letter include Apple, BHP Billiton, BP, Dupont, General Mills, Google, Intel, Microsoft, National Grid, Novartis Corporation, PG&E, Schneider Electric, Shell, Rio Tinto, Unilever, and Walmart. BP, Dupont, and Shell are all involved in biofuels. **R**

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Recognizing the Importance of Rendered Products

Have you ever been asked or wondered where and why rendered products are used? If asked, were you able to answer such questions with knowledge and confidence knowing that the explanation expresses the importance those products represent in everyday life? Do rendering company employees and managers realize the many uses of the products produced from a rendering plant?

Recently, to the surprise of many, tallow was identified as an ingredient in the production of the Bank of England's five-pound note. Even with 20 years of experience working in the rendering industry, I wasn't aware of this. Colleagues in New Zealand had shared a news article that stated, "Vegans and vegetarians have voiced outrage after it emerged the new £5 notes contain tallow," accompanied by a photo of a note being withdrawn from a "leather" wallet. I was further confused as there was no outrage over the leather wallet made from animal hide. To create change, a petition with 136,000 signatures was delivered to the Bank of England and now the bank is investigating alternatives to tallow.

The news article was well-balanced as it explained how tallow is used in the note production as a source of stearic acid for lubricity. It went on to describe that tallow could be found in a variety of every day products, "including plastic bags, makeup (including lipstick, foundations, and eye makeup), crayons, bike tires, and candles." The author attempted to show a wide range of uses, which provides an opportunity for the rendering industry to embrace its products and appreciate their diversity. The list above is short and the industry could certainly expand on the list of products.

As part of every employee's induction to a rendering company, there should be an opportunity to learn what is produced and where it will be used. Generally, an induction covers company policies and procedures for safety,

environment, and quality, but does it include the various products made and where they are used?

The induction is an ideal time to promote the rendering industry from within through training early in an employee's career. For existing workers, training in what products are manufactured and their uses should be covered. Also included should be that animal proteins and fats are economical commodities that are valuable for the formulation of many cost-effective products.

Every day around the world, vast quantities of animal by-products are efficiently collected and effectively processed. It is critical that raw material is rendered as quickly as possible due to its perishable nature. Processing "fresh is best" will lead to a better quality end product.

The most important criteria for the rendering industry is to manufacture rendered products that are safe and fit for purpose. Rendering is conducted in most countries around the world and the industry is regarded as a manufacturer of products that contribute to a sustainable animal agriculture, true recycling, essential to protecting the environment, and necessary for public and animal health.

Rendering is a strongly controlled industry where government regulations and industry codes of practice determine the specific criteria for manufacturing standards that may apply to that country. Importing requirements will also determine the ability to supply rendered products to a country. In general, such regulations will specify conditions on how to operate a rendering plant with consideration for the product produced, the environment, and the health and safety of the people working at the facility.

The rendering industry has been successful when arguing the case that if animal by-products were not recycled, large amounts of carbon, nitrogen, and phosphorous present in

Presidential Opportunity

In mid-May, Dirk Dobbelaere, secretary general of the European Fat Processors and Renderers Association, met Lech Wałęsa, president of Poland from 1990-1995 and Nobel Laureate in 1985, during the annual general assembly of the Polish poultry association and CLITRAVI, the European meat processing industry association. The meeting took place at Poland's Gdansk Shipyards where amid strikes in 1980, Solidarność, a Polish non-governmental trade union, was founded by Wałęsa and others.

The two men had a short chat on Poland's bloodless revolution that paved the way for the fall of the Berlin Wall in Germany and put an end to the dictatorships in other countries of Central and Eastern Europe where the communists were losing power. The disintegration of the Soviet Union became one of the most significant events of the late twentieth century and led to the beginning of the building of a new political and economic order in Europe. **R**



"He was an impressive person," said Dirk Dobbelaere (left) about Lech Wałęsa.

these by-products would contribute to the release of greenhouse gasses such as methane and carbon dioxide emissions, soil loading, and water contamination. Similarly it has been successfully argued that rendering animal by-products significantly reduces environmental emissions and is truly sustainable.

There are different kinds of rendering plant manufacturers around the world and many process designs using various equipment for time, temperature, and pressure combinations to process raw material. The myriad stages of the process involved are:

- heat treatment of raw materials to destroy pathogens (such as bacteria, viruses, protozoa, and parasitic organisms) and create phase separation between solids, water, and fat;
- separation of fat, water, and solids;
- drying of solids and purification of fats and oils; and
- milling of solids to form a meal.

It is in the best interest of the renderer to install the most efficient processing plant it can afford to alleviate issues that may arise with health, safety, environment, and quality of product.

Unknown to many in the general public, rendered products are used in the manufacture of a long list of beneficial goods: animal feeds, pet food, aquaculture feed, edible fats and oils, ointments, biodiesel, fertilizer, soaps, paints, varnishes, cosmetics, pharmaceuticals, shaving cream, deodorant, crayons, leather (i.e., handbags, car seats, furniture), lubricants, caulking (sealant) compounds, candles, cleaners, paints, perfumes, polishes, rubber products, plastics, agricultural fertilizers, explosives, and so on. Promoting an extensive list is an opportunity for the rendering industry.

The raw materials collected and rendered come from the meat industry where beef, sheep, poultry, pigs, and fish are handled by abattoirs, poultry processors, boning rooms, butchers, fish processors, supermarkets/markets, and skins and hide processors. Raw materials include fat, bone, trimmings, offal, blood, grocery store material, recalled product, animals dead on arrival or in transit, and feathers. Used cooking oil from restaurants is also processed by the rendering industry.

Rendering is an environmentally responsible and sustainable industry and should be considered as an essential industrial process as it provides a recycling service to the meat industry that helps protect society and the environment. Although rendering may still be the “invisible industry” to some, it is important that its customers, regulators, and the general public recognize that renderers conduct business under the highest government and veterinary controls, every single

day. In addition, the specific issues rendering addresses are the same issues organizations such as the World Organization for Animal Health, or OIE, and Food and Agriculture Organization are focused on by addressing feed and food safety and security and animal disease prevention. **R**

For further information on this topic, please contact the author, Tim Juzefowicz, at tim.juzefowicz@csfproteins.com.au or +61 418 170 583 (Australia).

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Rendering Wastewater for Electricity Generation?

It was with great sadness that the Clemson University Animal Co-Products Research and Education Center (ACREC) faculty, staff, and students learned of the passing of dear friend and supporter Carl Wintzer of G.A. Wintzer & Son Inc. in late December 2016. Roughly 18 months after Dr. Gary Pearl first approached Clemson University about the ACREC concept, the ACREC Steering Committee was formed. In 2004, Wintzer was a member of that committee and visited Clemson University on what would be the first of many visits. He became a well-known and much respected contributor to ACREC programs and was greatly adored by the faculty, staff, and students. For 13 years, his quiet wisdom, intense love of science, delightful sense of humor, and always happy demeanor set the tone for ACREC projects. Wintzer had a special passion for wastewater treatment systems along with scientific facts and figures.

Upon hearing of his passing, everyone at ACREC echoed the same sentiments – what a wonderful, true gentleman Wintzer was and how greatly he will be missed. The spring 2017 ACREC meeting was dedicated to him. Prayers and sincere condolences go to the entire Wintzer family from Clemson University and ACREC. We will miss our dear friend.

Rendering Wastewater to Generate Electricity?

At the spring 2017 ACREC meeting, proposals were reviewed for both continuing research as well as new projects. Eight of the 13 proposals submitted were selected for funding. Dr. Sudeep Popat, a new assistant professor in the Clemson University Department of Environmental Engineering and Earth Sciences, was selected to conduct an exploratory ACREC project to investigate the use of microbial fuel cells (MFCs) to further clean rendering wastewater while also generating electricity and/or value-added chemical products.



Dr. Sudeep Popat works with microbial fuel cells to generate electricity and chemicals from wastewater.

In an MFC, unique bacteria known as anode-respiring bacteria grow on an electrode submerged in wastewater. The bacteria use the chemical components in wastewater as food. During their growth and respiration under anaerobic conditions (without oxygen), the bacteria create an electrical current that can be used for power. In addition to generating electrical power, other by-products such as hydrogen gas, hydrogen peroxide, and sodium hydroxide (caustic soda) as well as valuable chemicals can be produced by different modifications to the system.

Although MFCs have been studied extensively for use in domestic wastewater treatment, these units have not been investigated for use in rendering wastewater applications. In general, domestic wastewater treatment involves low-strength



Photo by Mark Grammer

Carl Wintzer spoke at the National Renderers Association/Fats and Proteins Research Foundation meeting at Clemson University in April 2009.



Erika Weltzien (*left*), Rothsay, is presented a gift by Dr. Annel Greene in appreciation of Weltzien's dedication and service to ACREC during her tenure as the Fats and Proteins Research Foundation chairman from 2014-2016.

wastewater meaning it contains low levels of organic components. Previous studies using low-strength domestic wastewater have shown the proof of concept of the MFC system, but the electrical power produced has been low. However, rendering wastewater contains higher-strength wastewater meaning it contains higher concentrations of organic components. It is hypothesized that a potential advantage to using rendering wastewater in an MFC will create a greater amount of electrical current that could lead to production of electrical power or other products at high rates. Popat will be examining this hypothesis by building an MFC and using rendering processing plant wastewater as the feed for the bacteria.

Based on his preliminary work, Popat expects good removal and conversion of wastewater components that will result in further cleaning of the water. It is not known what impact high fats, oils, and greases will have on the process; therefore, he will examine how these components affect electrical current output from the MFCs. Popat hypothesizes that high protein content in the wastewater will likely be an advantage for the MFC bacterial populations.

In addition to electricity generation, one of the major advantages of MFCs in biological wastewater treatment is the production of a range of chemical by-products in addition to or as an alternative to electrical power. For instance, development of hydrogen peroxide from the process could provide a value-added product that might be used within the rendering plant for cleaning, disinfection, and/or odor control. Other products, such as ammonium-based fertilizer could be possible as value-added by-products, creating a new profit center for renderers from their wastewater. If this preliminary proof of concept project is successful, it could lead to further work on development of MFCs for eventual pilot-scale testing and commercial use. **R**

Washington *Continued from page 7*

20 percent rate, politics suggests it will come in closer to 22 to 25 percent.

If a one-time repatriation of all or part of the estimated \$2.5 trillion in US company profits held overseas is successful, say at a one-time tax rate of 10 percent, then there will be an extra \$1 trillion or so in the bank. If all of the stars align and a personal tax reform package cutting the number of tax brackets from seven to three, the highest being around 25 percent, kicks in – with an assumed

massive closing of existing loopholes – then appropriators are faced with the enviable task of figuring out how to spend all that new-found money.

However, those are big “ifs.” For now it is assumed the federal cash pot will remain generally unchanged, at least through the end of FY 2017 on September 30. The Trump White House will continue to blow the trumpet of massive spending cuts, but the power of the purse will remain firmly in the hands of the lawmakers on Capitol Hill, and it is a safe bet that grip will not loosen. **R**

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New Trump Administration Shakes Things Up

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

Looking at the volume and cost of environmental regulations compared to those of other federal agencies clearly confirms the expanding regulatory scope of the federal government in environmental regulation (figure 1). A recent report by the U.S. Chamber of Commerce, titled *Taming the Administrative State*, notes that in 2015, the United States (US) *Code of Federal Regulations* (CFR) contained over 175,000 pages of environmental regulations that accounted for 25 percent of the CFR, far more than any other area of government.

When costs of the regulatory burden are examined, the message is even clearer. Between 2008 and 2016, the US Environmental Protection Agency (EPA) issued 13 of the 28 rules that had an annual price tag of \$1 billion or more. Those rules alone impose yearly costs of over \$60 billion, dwarfing such rules by other executive branch regulatory agencies (figure 2).

Since the onset of President Donald Trump’s administration, there have been many developments affecting the

environmental regulatory landscape at the federal level, from executive orders to congressional action to agency review of recent rulemaking. This article will address some of the more significant developments of interest to the rendering industry.

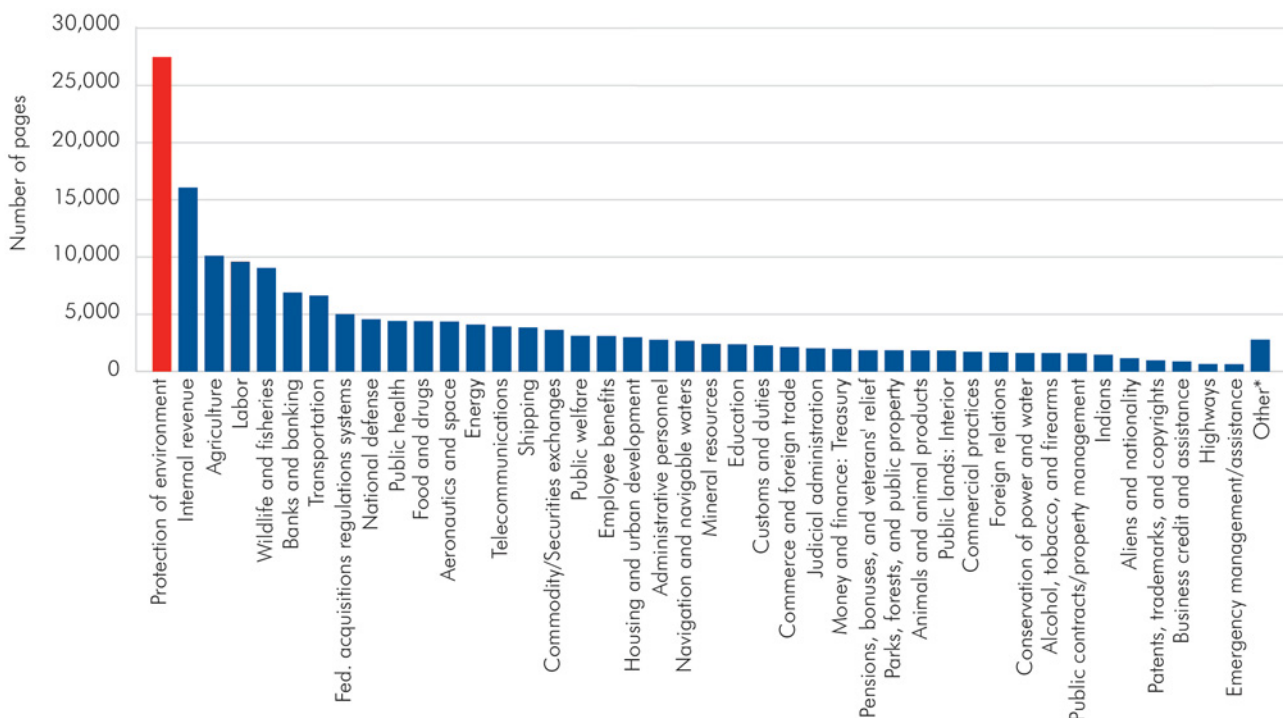
Sending a Message

In one of the earliest acts of his presidency, Trump signed the “one-in-two-out” executive order on January 30, 2017, requiring each agency to identify two regulations it will cut for every new rule it introduces. The order also caps the regulatory budget at zero, such that savings shall be identified to offset the cost of any new regulations. This order sends a message to federal agencies regarding the hostility of the new administration toward imposing additional regulatory burdens.

In a related executive order, federal agencies were directed to establish a regulatory reform task force to identify existing regulations that, among other things, eliminate jobs or inhibit job creation; are outdated, unnecessary, or ineffective; or impose costs that exceed benefits. EPA published a notice in April requesting comments on specific regulations that should be repealed, replaced, or modified.

Under the new administration, Congress has used the Congressional Review Act (CRA) to nullify 11 regulations previously issued by regulatory agencies. The CRA was a

Figure 1. Federal environmental regulations by volume dwarf those of other agencies



Source: U.S. Chamber Environment, Technology, and Regulatory Affairs Division

Note: *Other includes federal elections, postal service, the president, grants and agreements, domestic security, accounts, and general provisions.

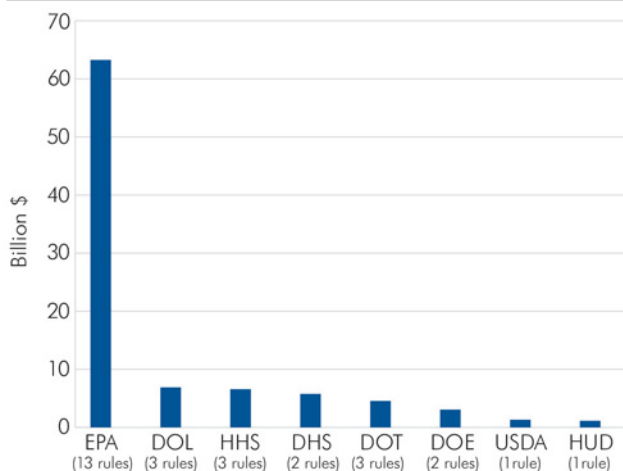
little-used law passed in 1996 intended to address midnight rulemaking by outgoing administrations. The CRA allows Congress, by simple majority vote, to override regulations published within 60 legislative days of a new administration, and perhaps further back in time if proper notice of the rulemaking was not given to Congress. By one count, there are at least 43 major rules that were never properly reported to Congress and at least 1,000 other agency actions each year that potentially could be challenged, many of which are in the environmental sphere. Once overruled, the agency is essentially forbidden from readopting a new rule that is substantially similar. The use of the CRA is largely new territory and is seen by some as a significant tool that could be used to undo many of the regulations imposed during President Barack Obama's administration.

New EPA Direction

On February 17, 2017, Scott Pruitt, former attorney general for Oklahoma, was confirmed as EPA administrator. As attorney general, Pruitt challenged EPA's Clean Power Plan for cutting carbon emissions from power plants, along with the "waters of the US" (WOTUS) rule expanding federal jurisdiction over additional waters and adjacent upland areas. He also joined in a lawsuit challenging EPA's authority to impose on the states a regional plan to clean up the Chesapeake Bay.

As an outspoken advocate for a limited role by EPA under principals of federalism, Pruitt is expected to take steps to reduce EPA's influence and to enhance the role of the states in environmental protection matters. Among the major changes anticipated during Pruitt's tenure at EPA are efforts to unwind the Clean Power Plan and pull back from meeting greenhouse

Figure 2. Annual costs of compliance with EPA rules overshadow those of other agencies



Source: U.S. Chamber Environment, Technology, and Regulatory Affairs Division

Note: This chart contains only rules by executive branch agencies.

gas reduction commitments under the Paris Agreement, rolling back the WOTUS regulation, and significant reductions in EPA staffing levels.

The fiscal year 2018 federal budget proposed by Trump called for a 31 percent reduction in EPA's budget and targeted cuts in funding for Great Lakes restoration, nonpoint source reductions, climate change, and Chesapeake Bay cleanup. The proposed budget is often seen as more of a message board

Continued on page 30

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than reflective of the actual budget ultimately adopted by Congress. The omnibus spending package agreed to in May by Congress to fund the federal government through September leaves EPA funding largely intact.

Cutting the budget does not mean the obligation to implement programs to comply with existing environmental laws and regulations goes away. For instance, cuts in the budget do not change the timeline for meeting pollution reduction targets under the Chesapeake Bay Blueprint, a plan that has been validated by the courts. Deep cuts in many areas of EPA's budget, such as Chesapeake Bay cleanup, with the thought of delegating back to the states, could be seen as an offloading of costs from the federal budget back to the states.

Waters of the US Rule

In 2015, EPA finalized rules revising the definition of "waters of the US" to greatly expand the agency's jurisdiction over activities in wetlands, intermittent streams, drainage ditches, and upland areas. This was purported to clarify the scope of federal jurisdiction over upland and isolated waterways, but was widely seen as a huge power grab by EPA and the Army Corps of Engineers.

A nationwide stay on enforcement was issued in October 2016 and the US Supreme Court later agreed to hear the case to determine whether challenges such as this should be brought in federal district courts or federal courts of appeal. On April 1, 2017, the Supreme Court denied a request to hold this case in abeyance pending the federal regulatory review and will proceed in addressing the question as to the proper court in which to bring such challenges, an important determination for the regulated community.

Meanwhile, on February 28, 2017, Trump ordered EPA to review the WOTUS rule with a view toward regulating the water quality of a more narrowly defined "navigable waters" while minimizing federal regulation and interference with the states. EPA has announced plans for "repeal and replace" rulemaking to begin.

Ozone Rule

In 2015, EPA adopted a new National Ambient Air Quality Standard (NAAQS) for ground-level ozone, lowering the standard from 75 parts per billion (ppb) to 70 ppb, a level that will put a large portion of the expanding, robust economic areas in the country into nonattainment. The nonattainment designations are slated to be published in October 2017 after which the affected states will be required to adopt new plans that will largely target stack emissions of volatile organic compounds and nitrous oxides. Nonattainment areas include metro areas in Arizona, California, Louisiana, Michigan, Ohio, Oklahoma, Pennsylvania, New Mexico, New York, North Carolina, Texas, Virginia, and others. EPA is reviewing the rule while a lawsuit in the US Court of Appeals for the District of Columbia Circuit (DC Circuit) challenging the rule has been suspended pending completion of EPA's review.

In 2016, a bill was passed by the US House of Representatives (HR 4775) to extend implementation deadlines, including nonattainment designations, to 2025 and change the review

cycle from 5 years to 10 years. The same bill, Ozone Standards Implementation Act, was introduced in the new Congress on February 1, 2017, as Senate 263/HR 806. As part of the omnibus spending package signed into law on May 5, EPA was directed to examine options for flexibility in the implementation of the 2008 and 2015 ozone standards.

Startup, Shutdown, Malfunction Rule

In 2015, EPA ordered 36 states to rewrite certain rules that allowed for waiving of penalties for excess emissions during startups, shutdowns, and malfunctions. On April 24, 2017, the agency filed a motion to postpone oral arguments in a federal court case challenging this rule in order to allow EPA more time to further review the matter.

Clean Power Plan

EPA's Clean Power Plan was put in place under the Obama administration targeting reductions of emissions of carbon dioxide (CO₂) from existing coal-fired power plants by 32 percent and essentially banning the building of new coal-fired power plants. On February 9, 2016, the US Supreme Court granted a nationwide stay of implementation of the plan pending judicial review of its validity. The case remains pending in the DC Circuit. On March 28, 2017, Trump ordered EPA to review the plan. On April 28, the court granted EPA's motion to suspend the lawsuit for 60 days and agreed to consider further disposition.

It could take years to unravel this plan, whether by rulemaking or through the courts. Nonetheless, this move raises the question as to what steps, if any, the Trump administration plans to take to comply with the commitment to reductions in CO₂ made at the 2015 United Nations Climate Change Conference in Paris, France. So far, the Trump administration has not signaled a clear intent on further commitment to the Paris Agreement's reductions in CO₂.

It is important to note that while Trump refers to this as an end to the war on coal, technological changes and the economic forces favoring the production of natural gas are likely to limit the recovery of coal production for power generation in the United States.

Endangered Species

Some observers in Washington, DC, predict that with the Republicans in control of Congress there will be an initiative to rein in the influence of the Endangered Species Act. The act is seen by many as a tool used by wildlife advocates to block economic development, including the halting of logging projects, impeding of oil and gas development, and reallocation of water in the West. US House of Representatives Natural Resources Committee Chairman Rob Bishop said the act "has never been used for the rehabilitation of species. It's been used for control of the land...it has been hijacked." Some changes under consideration could result in making it harder to list new species, capping how many species can be protected, and allowing greater input by the states.

Currently, over 1,600 plants and animals are protected under the act with hundreds more under consideration. Less than 70 have recovered to the point of having protections lifted. On March 21, 2017, the rusty patched bumble bee became the latest to be listed by the US Fish and Wildlife

Service, even though there is a lack of consensus that its decline is due to habitat loss. This species has a habitat range across 28 states.

Risk Management Program Rule

EPA submitted a final rule for publication in the *Federal Register* on December 21, 2016, affecting risk management programs, which are required at facilities that have certain quantities of hazardous materials onsite, such as ammonia refrigerant. Among other things, the revisions would require a root-cause analysis investigation after “near miss” incidents that could have resulted in a catastrophic release, third-party compliance audits after a reportable incident, annual exercises and coordination with local responders, and greater public disclosure about the facility’s emergency response program.

On April 3, 2017, EPA proposed delaying the effective date of the revisions to 2019 in order to “consider petitions for reconsideration of this final rule.” Measures have been introduced in both the US House and Senate for repeal of this rule under the CRA. **R**

June

National Renderers Association Central Region Meeting

June 7-9, Elkhart Lake, WI • e-mail Jason Hartman at jasonh@mendag.com

World Pork Expo

June 7-9, Des Moines, IA • www.worldpork.org

American Meat Science Association 70th Reciprocal Meat Conference

June 18-21, College Station, TX • www.meatscience.org

July

Australian Renderers Association 14th International Symposium

July 25-28, Gold Coast, Queensland, Australia • www.arasymposium.com.au

August

Association of American Feed Control Officials Annual Meeting

August 9-13, Bellevue, WA • www.aafco.org

2nd Annual Canadian Beef Industry Conference

August 15-17, Calgary, AB, Canada • www.canadianbeefindustryconference.com

September

10th Annual National Aboveground Storage Tank Conference and Trade Show

September 13-14, Galveston, TX • www.nistm.org

October

Global Aquaculture Alliance’s Global Outlook on Aquaculture Leadership (GOAL)

October 3-6, Dublin, Ireland • www.aquaculturealliance.org/goal

Poultry Protein and Fat Seminar

October 5-6, Kansas City, MO • www.uspoultry.org

American Fats and Oils Association Annual Meeting

October 11-12, Chicago, IL • www.fatsandoils.org

US Animal Health Association 121st Annual Meeting

October 12-18, San Diego, CA • www.usaha.org

2017 Feed and Pet Food Joint Conference

October 23-25, Louisville, KY • www.ngfa.org

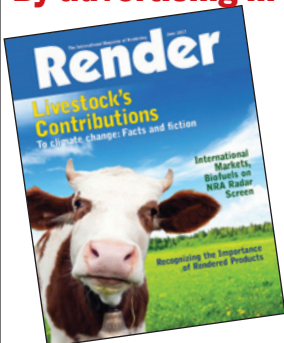
National Renderers Association 84th Annual Convention

October 23-27, San Juan, Puerto Rico • e-mail Marty Covert at co@martycovert.com or call (703) 754-8740

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OSHA Post-accident Rapid Response Investigation

Editor's note – Mark A. Lies II is an attorney in the Environmental, Safety, and Toxic Tort Group in the Chicago, Illinois, office of Seyfarth Shaw LLP. He is a partner who focuses his practice in the areas of product liability, occupational safety and health, workplace violence, construction litigation, and related employment litigation.

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Legal topics provide general information, not specific legal advice. Individual circumstances may limit or modify this information.

The Occupational Safety and Health Administration (OSHA) requires employers to report certain serious injuries by telephone within 24 hours of the employer becoming aware of the incident. These include any employee inpatient hospitalization for treatment, amputation, or loss of an eye. Any fatality, including one caused by a heart attack, must be reported within eight hours.

Under OSHA guidelines, fatalities, hospitalizations of employees, and employers with a history of injuries could bring about an onsite inspection as a result of the initial report. Initially, OSHA has the option to request the employer conduct a Rapid Response Investigation (RRI) using an RRI form. OSHA reports that it requests an RRI form following most accidents and generally does not require an onsite inspection of the workplace.

Yet the RRI form responses could form the basis for a subsequent OSHA inspection. Accordingly, employers need to be careful about what is put on this form to avoid an “admission” of liability that could be civil or criminal. Additionally, since the RRI responses are not legally privileged, they are discoverable in civil, third-party litigation.

Not a Safe Harbor

While OSHA claims that the RRI creates a “safe harbor” for an employer’s internal investigation, it can use employer admissions on this form to conduct an investigation and will interview managers and employees to confirm the specific facts or statements made in the response. When confronted with the prior statements, managers may have a difficult time explaining the context of factual misstatements of non-compliance or erroneous factual information on the RRI form. Citations can be based on any subsequent management admissions.

As reported at the American Bar Association’s recent OSHA conference, the agency estimates that the majority of citations are based on the employer’s admissions of violations, in documents, and spoken to the investigator. Thus, management admissions to OSHA in the RRI pose a risk of triggering an onsite inspection and citations.

General Recommendations for Response

When answering the RRI questions, employers should follow some general recommendations.

Be truthful: First and foremost, RRI responses must be 100 percent factually accurate. Do not make any misstatements. The United States Department of Justice regularly prosecutes employers and managers who make material misstatements to federal officials as obstruction of justice or a false statement, both of which are a felony.

Keep it simple and short: Employers do not need to provide lengthy responses on the RRI form. Include the minimum amount of essential information to clearly describe what occurred and the company’s corrective actions taken, if any.

Answer the questions asked: Limit responses to the questions asked and do not digress into potential hypothetical situations or events.

Avoid speculation: The company should only report what witnesses actually saw or what the company firmly knows from physical evidence and not what someone thinks “may” have occurred. Speculation on the cause of the accident can create unnecessary admissions. In addition, there is no regulation that requires the employer to conduct a root cause analysis in order to complete the RRI form. In the case of a serious accident, if the employer decides to conduct a root cause analysis, it should consider having its legal counsel involved from the outset to direct the investigation and create legal privileges for the root cause analysis, attorney client and work product, which will protect the investigation from disclosure in OSHA proceedings or other litigation.

When it doubt, seek advice from counsel experienced in OSHA: If the employer engages experienced counsel, it can avoid preparing an RRI response that could create potential liability.

Specific Responses on the RRI Form

If reporting an incident on an RRI form, take particular note in answering the following questions.

Section C1: Date and time of the incident: If there is no eyewitness testimony, do not speculate as to the time of the accident. A range of dates can be provided if the accident occurred in the late evening and no one knows for sure when it occurred.

Section C3: What was the employee doing just before the incident occurred? If there is no reliable eyewitness testimony, do not speculate as to what the employee was doing at the time the incident occurred. A permissible answer would be, “Unknown, no eyewitness testimony.” If the company wants to state a best assessment based on physical evidence as to what occurred, an example could be, “Unknown, no eyewitness testimony. The company believes the injured employee was loading widgets into the grinder. Investigation continues.”

Section C4: What happened? A simple description of what occurred is sufficient. No regulation requires the employer to

do a root cause analysis on the accident and to provide an exhaustive chronology of facts. Likewise, employers do not have to generate written employee statements or photographs to submit with the RRI. Again, if there is no reliable eyewitness testimony, do not speculate as to what the employee was doing at the time the incident occurred. If the company wants to provide basic detail, a proposed answer could be, "Co-workers saw the injured employee remove a machine guard and place his hand in the operational grinder machine."

Section C5: What was the injury or illness? Again, a simple statement is appropriate. Employers are not required to provide a detailed medical description of the injury or illness. If an employee injury or illness has been diagnosed by a doctor, provide that summary diagnosis. If the injury is clear (e.g., finger amputation), provide that description. Otherwise, do not speculate beyond common knowledge; simply state, "The employee injured his finger" or, "The employee's finger was amputated."

Section C6: What object or substance directly harmed the employee? Again, if there is no reliable eyewitness testimony or unquestionable physical evidence, do not guess as to what the employee was doing at the time the incident occurred. Be careful speculating as to what occurred: "The employee was discovered on the floor next to a fallen ladder. It is believed that he was injured and may have fallen. Investigation continues."

Section D: What caused or allowed this incident to happen? OSHA's instructions ask for a full analysis of the equipment, policies, and compliance. Keep the answer short and limited to known facts. If the employee was properly trained and did not comply with his training or use an appropriate tool, practice, or safety device, which would constitute employee misconduct and a potential defense to an OSHA violation, describe the misconduct.

Section E: Corrective actions taken to prevent future incidents: OSHA is less likely to conduct an inspection if it believes that corrective actions to prevent future accidents have been taken. Taking corrective action is not an admission of liability for OSHA violations, but it should not be described in terms

of an action that the employer "should" have taken before the accident and "failed" to do so, which would be an admission. Employers should specify what actions have been taken following the accident. The most common actions would be retraining employees on proper safety procedures, use of tools or safety devices, or wearing of personal protective equipment.

Conclusion

It is recommended that employers utilize an RRI form to respond to OSHA,

although the employer always has the option of a narrative in letter format. In either event, the response must be factually accurate and not based on speculation, which may not be correct. In addition, the employer is not required to admit any violations in the RRI that can occur if the employer does not limit the response to known facts about the event and description of any corrective action. In the event of a serious injury or fatality, engagement of experienced OSHA counsel should be considered to create legal privileges. **R**

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American Proteins Honored for Truck Safety

American Proteins' Hanceville Division Fleet Department received three awards from the Alabama Trucking Association (ATA). Keith Allred was named Maintenance Professional of the Year, Tim Flack was selected Driver of the Year first runner-up, and the company received a driver safety award. Candidates are nominated by ATA members and an independent panel of judges composed of troopers from the Alabama Law Enforcement Agency's Motor Carrier Safety Unit rank and select winners.

ATA awarded American Proteins first place for Private Carrier over 5 Million Miles (this includes miles driven by the Cuthbert Fleet in Alabama). The company maintained the safest accident frequency rate for miles driven within the state of Alabama in 2016. American Proteins operates the largest poultry protein and lipids conversion operation in the world, annually producing more than 750,000 tons of pet food and feed-grade poultry protein meal, poultry fat, and feather meal.

Darling to Jointly Expand Insect Production

Intrexon Corporation and Darling Ingredients Inc. have announced their joint venture, EnviroFlight LLC, plans to significantly expand production of advanced ingredients for feed derived from black soldier fly (BSF) larvae through the largest commercial-scale BSF larvae production facility in the United States. Construction of the new Ohio plant employing EnviroFlight's modular and scalable system was to begin in May. Initial production capacity is expected in the first quarter of 2018 and will supply the livestock, aquaculture, and pet food markets.

"EnviroFlight's BSF larvae represent an innovative approach to address challenges within the global food supply chain by providing environmentally friendly, nutritious ingredients for animal feed," stated Randall Stuewe, chairman and chief executive officer of Darling Ingredients. "This new facility will allow us to produce BSF larvae at commercial volume and sets the foundation for potential future global expansion."

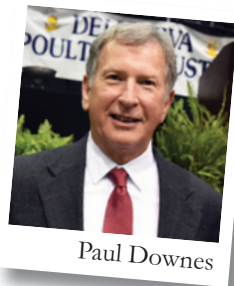
EnviroFlight's insect-based approach offers significant potential to convert nutrients from abundant food surpluses and renewable energy co-products into valuable proteins, oils, and fertilizers. Within the fish and poultry markets, BSF larvae also represent a more typical diet for these natural insectivores as compared to soy and other plant-based meals.

Intrexon Corporation is a leader in the engineering and industrialization of biology to improve the quality of life and health of the planet.

Mountaire President Awarded

Paul Downes, president and chief executive officer of Mountaire Farms, was presented the J. Frank Gordy Sr. Delmarva Distinguished Citizen Award by Delmarva Poultry Industry Inc. Under his leadership, Mountaire has grown to become the seventh largest chicken company in the United States and the nation's largest private label chicken company. Downes had led Mountaire's community efforts of feeding thousands of families at Thanksgiving, Christmas, and Easter events, as well as year-round donations to food banks. When wildfires struck North Carolina in 2016, the state's governor called on Mountaire seeking emergency food donations for firefighters and the company responded with immediate assistance. As an individual, Downes is a generous and quiet contributor to several community projects.

A Delaware native, Downes started his career in Delmarva's poultry industry as a flock supervisor before working his way up to leadership positions. He has worked at Mountaire for 34 years and also currently serves on the National Chicken Council's board of directors.



Tyson Foods Names First Sustainability Officer

Tyson Foods Inc. has appointed Justin Whitmore to the newly-created role of chief sustainability officer following the company's recent introduction of a new purpose and strategy that places sustainability at the center of the company's future plans. Whitmore, who was most recently a consultant at McKinsey & Company, will be part of Tyson's enterprise leadership team, reporting directly to President and Chief Executive Officer Tom Hayes.



As chief sustainability officer, Whitmore will provide leadership and direction to help the company achieve its strategic intent of sustainably feeding the world with the fastest growing portfolio of protein-packed brands. He will work to implement solutions that drive industry-leading impact on all dimensions of sustainability. Under Whitmore's leadership the company will strive to innovate and simultaneously deliver healthier food, healthier animals, a healthier environment, and a healthier workplace.

Whitmore has experience consulting on strategy, operations, and sustainability for food processing, consumer packaged goods, and foodservice. At McKinsey, he developed innovative solutions to address sustainability issues while considering operational complexity, consumer demand, market share growth, and financial discipline. Whitmore earned his bachelor's degree in business management from the University of Alabama Birmingham and his master of business administration from the University of Notre Dame. **R**



RENDERING IS RECYCLING

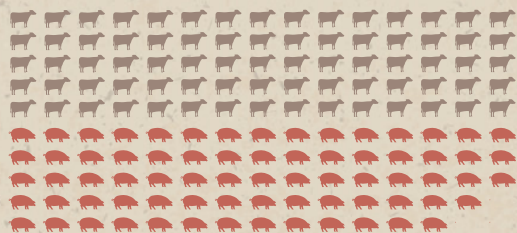


RENDERING IS AN ENVIRONMENTALLY FRIENDLY WAY TO RECYCLE MATERIAL THAT WOULD BE WASTED

WHAT MATERIALS ARE RENDERED?

Packing Plants

147.2 MILLION head of cattle, calves, hogs & sheep are slaughtered annually in the US



10 BILLION chickens and turkeys are processed each year in the US

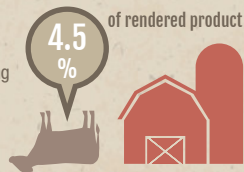


APPROXIMATELY 50% of the animal is considered inedible by Americans and goes to renderers including: bones, fat, blood, feathers & some internal organs



Farms

Some animals die on the farm from injury, old age, or other issues. Renderers prevent this from becoming a public health hazard by eliminating pathogens in the rendering process. Fallen animals only 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

RENDERING IS SAFE & ESSENTIAL

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



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 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



Rendered products are ingredients in:



Pet & livestock feed

Biofuel

Fertilizer

Plus Other products like soaps, lubricants, detergents, and more.

RENDERING IS Green!

Rendering is:

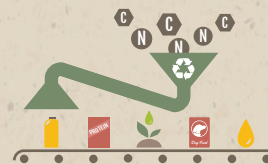
the process of breaking down animal by-products into fats & proteins



Rendering is recycling!

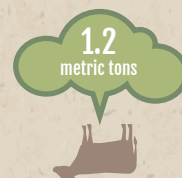
Carbon- and nitrogen-rich materials are recycled into

USEABLE PRODUCTS



Rendering reduces greenhouse gases.

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



A single decomposing dairy cow releases **1.2 METRIC TONS** of carbon dioxide.

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FOR SALE - Westfalia Desludger Centrifuge-Clarifier with self-cleaning bowl. SA-60-06-177. Have manuals and all tools for the machine. Stainless construction, 40 hp, main drive motor. All electric switchgear H-beam mounted. Rebuilt, but used very little. \$60,000.
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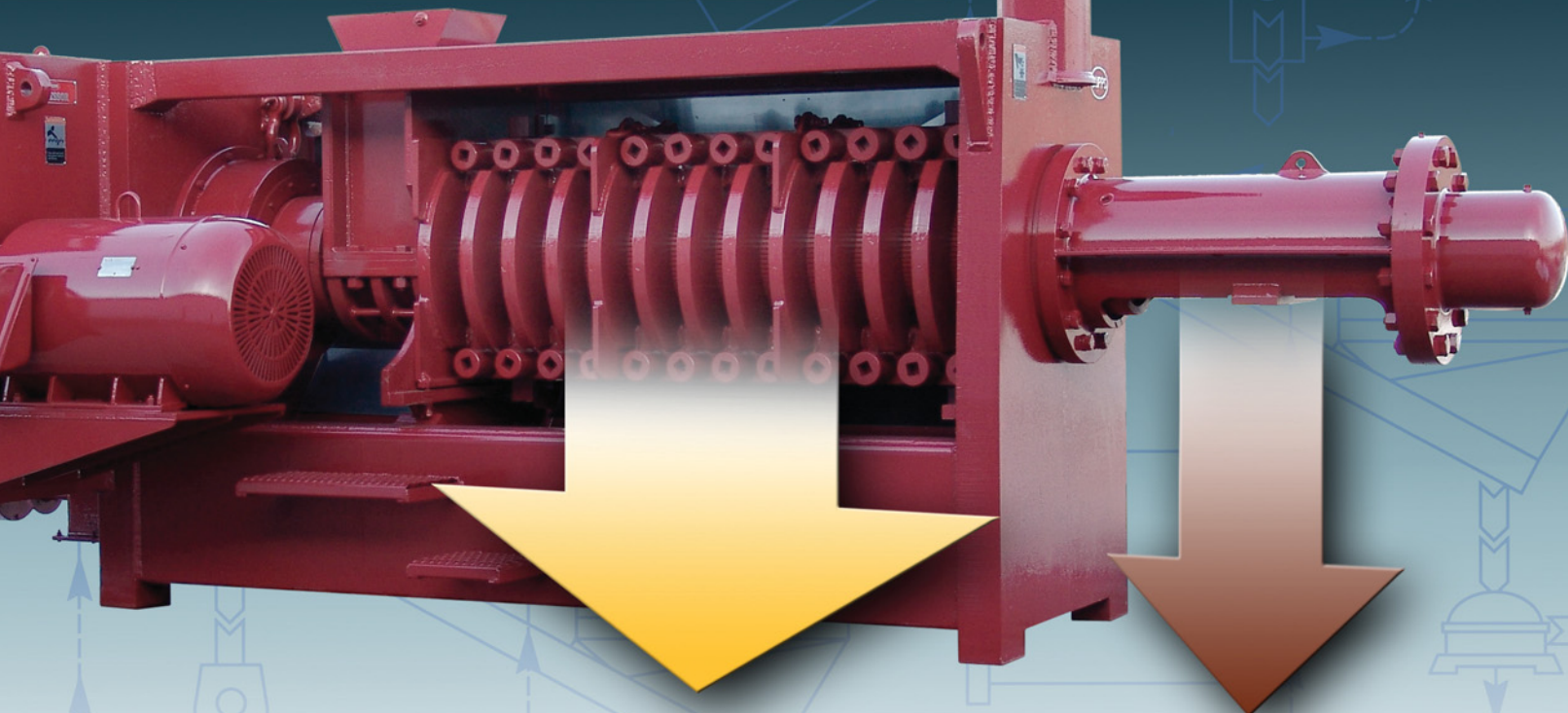
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Industry Websites

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American Oil Chemists' Society	www.aocs.org
Animal Agriculture Alliance	www.animalagalliance.org
Animal Protein Producers Industry	www.nationalrenderers.org/biosecurity-appi
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