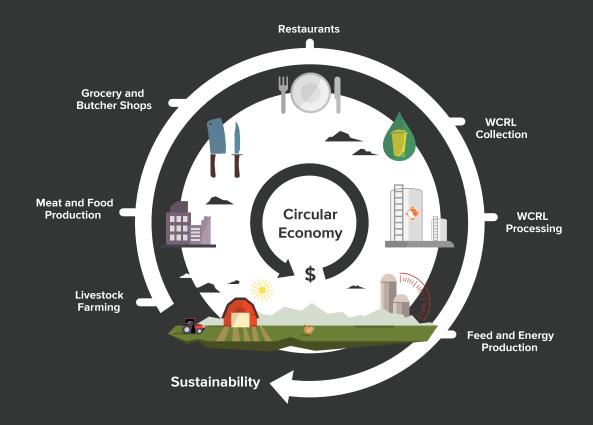
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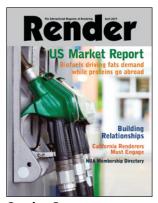
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On the Cover

Renewable fuels continue to drive demand for animal fats while proteins find a home in export markets. p. 10

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Rendertorial

We live in a digital world both professionally and personally. This advancement has led to phone calls becoming almost non-existent thanks to email, texting, messaging, and social media. Because of this, interpersonal skills and relationships are suffering. Building and maintaining relationships takes commitment, trust, compromise, effort, and personal contact. Some of these come naturally and instantly, while others require nurturing and time.

When building a relationship, though, one thing still almost certainly assures success: a face-to-face connection. Yes, in this digital age, effective relationships still require meeting and talking to each other in person. Below are several cases in point.

During a recent popular and largelyattended conference, a rendering company hosted a small group dinner, inviting about 20 individuals from different aspects of the industrybrokers, competitors, end product users, and even the media (gasp!). It was a lively evening of camaraderie and discussions. At the end of the dinner, the host thanked all for coming, announcing how happy he was that everyone came together to "build relationships." Whether any business was conducted that evening or not wasn't the point. People met face-toface, talking, laughing, celebrating, and simply enjoying each other's company. Many relationships were formed or strengthened that night.

Another instance was at a smaller rendering meeting where an individual, whose company provides equipment, attended for the first time. During one of the meeting's social events, this person was introduced to someone who had seen the company's products advertised in *Render* and had been meaning to call but had been too busy. The two then proceeded to discuss equipment and thus developed a relationship that evening.

The rendering industry has long been built on relationships with suppliers and customers. The digital age has propelled the industry into new realms, so building and sustaining relationships is even more imperative, especially in person.





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The Congressional Machine

The 2020 general election is still 18 months away, but so far it is sucking up all the air in every room in Washington, DC. To date, 16 Democrats have either announced formal campaigns for the United States (US) presidency or formed exploratory committees for a presidential run. Almost none of the announced aspirants have a chance at snagging the party nomination. Another handful of Democrats, including former Vice President Joe Biden, will soon announce their respective grab for the political brass ring. President Donald Trump thus far only has a single announced Republican challenger for his party's nomination, but there will likely be others. There is also an announced Independent aspirant.

The 2018 general election last November and the shift in control of the House to Democrats—and Representative Nancy Pelosi's (D-CA) swan song run as Speaker of the House—means everything that Congress tackles in its 116th iteration will be in the context of unseating Trump in 2020. Deep runs the Democrat, and likely islands of GOP, antipathy toward the sitting chief executive. Making good on postelection threats, newly seated House Democrat committee chairs—most notably Representative Jerry Nadler, chair of the Judiciary Committee, who noted that now is "a critical time in our nation"—have announced an unprecedented series of hearings over the next several months targeting allegations of Trump obstruction of justice, public corruption, and abuse of power. Many of the allegations involve Russia, whether public or private dealings, and target not only Trump and a list of his current and former cabinet and inner circle, but also his family, his/their finances, and the president's taxes. House subpoenas are "falling like rain" on the White House, one lobbyist said.

Insiders say the investigations are likely because it is expected that Special Counsel Robert Mueller's final report on Russian involvement in the 2016 elections will not be the "smoking gun" many Trump opponents hope. The president branded the House actions "presidential harassment by 'crazed' Democrats at the highest level in the history of our country" and calls the hearings a "hoax," but says he will cooperate.

Senate Majority Leader Mitch McConnell (R-KY) appears to have gone into reactive mode, signaling that, for now, there will be little original legislation popping up in the Senate. That chamber will spend much time deciding which, if any, Houseapproved measures will see floor votes, again all weighed in the context of which plays will have the best outcome in the mid-term elections November 3, 2020.

Another given is fiscal legislative fisticuffs over fiscal year 2020 appropriations. Neither party wants a replay of the historic 35-day partial government shutdown earlier this year, an act of omission by Congress and the White House that left 350,000 government employees without offices to go to and more than 800,000 federal workers without immediate income. Just for good measure, throw in the federal debt ceiling and a deficit that is the fault of both parties, then let the blame game begin.

Meanwhile, Pelosi is pushing forward on her "For the People" agenda, a 10-bill legislative to-do list that highlights lowering healthcare costs, cutting prescription drug prices, infrastructure investment as the engine of economic growth, and her party's approach to "draining the swamp" in Washington, DC. Procedurally, moving such far-reaching individual bills forward will be tough and take time as nearly all of them enjoy joint or sequential referrals to multiple committees.

H.R. 1, the legislation on which the first full House vote was taken under the new Democrat regime, tackles the whole "swamp" thing. The bill, approved on a 234-193 party line vote, is a package of individual bills seeking to impose election reforms, such as campaign finance modernization, expanded voter access (including an automatic voter registration system), and redistricting rules. An Internal Revenue Service-designated 501(c)(4) organization, which may include several trade associations and professional groups, would be required to identify large donors. Interestingly, the legislation allows federal election candidates to treat a broader array of election expenses as campaign costs, including child care and healthcare costs

The bill sets new ethical rules for the executive branch and Supreme Court justices, and tightens standards on post-government private employment, particularly as "advocates" for private interest. It shortens the time required to register as a federal lobbyist and increases regulation of foreign agent registration. The bill's new programs would be paid for by an "optional public matching system," not tax dollars, and the money will come from corporate fines paid for various government rule violations.

H.R. 1 will see no action in the Senate, McConnell declared within minutes of the House vote. It is also highly unlikely that H.R. 8, approved directly after H.R. 1 was passed in order to expand gun sales background checks to include gun shows and online sales, will get a Senate vote.

In no particular order, some of the business pieces of the House Democrat agenda follow, along with some other renderer-relevant actions expected this year.

A major duke-out both within and between the two major parties is expected over legislation designed to tackle climate change. Pelosi has provided no clues as to how she plans to approach the issue given her own caucus' internal disagreement on how deeply the federal government should be involved. The starting point for the conversation, however, appears to be a non-binding resolution dubbed the Green New Deal (GND) laid out with great fanfare in February by Representative Alexandria Ocasio-Cortez (D-NY), with an identical resolution introduced in the Senate by Senator Ed Markey (D-MA). The GND has a goal of net-zero US greenhouse gas (GHG) emissions by 2025, yet also addresses pay equity, employment, and other social program goals near and dear to Ocasio-Cortez and Markey.

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The resolution's background information embraces several debunked urban myths, including bovine flatulence—Ocasio-Cortez's fact sheet called them "farting cows"—as a major GHG contributor. The frustration voiced by agriculture when the plan was unveiled led to Ocasio-Cortez supporters reaching out to rural climate experts, including those at the University of California-Davis, to talk about agriculture's ongoing climate change mitigation efforts. The outreach led to her office dropping the cow flatulence reference.

Markey's partnering with Ocasio-Cortez did not endear him to Senate Democrats vying for the party's presidential nomination, including Agriculture Committee members Senators Amy Klobuchar (D-MN) and Kirsten Gillibrand (D-NY). McConnell waited only a few days before announcing he will schedule a floor vote on the GND resolution, seen as forcing Democrats (including the presidential hopefuls), to go on record supporting what is, at best, being called a "politically tenuous" approach to climate change.

Pelosi created the House Select Committee on the Climate Crisis as part of her wheeling and dealing to be reelected Speaker. A select committee, however, cannot approve legislation and move it forward, so the panel is expected to hold several hearings and make recommendations. It is viewed more as an information clearing house than a legislative committee.

Pelosi initially called the Ocasio-Cortez GND resolution "one of several, or maybe many, suggestions we receive. The green dream, or whatever they call it, nobody knows what it is, but they're for it, right?" In mid-March, she told a university audience in Washington, DC, "I can't say we're going to take

that [GND] and pass it because we have to go through our checks and balances with our committee chairs and the rest." One report called the resolution "a starter measure."

There is no legislation with specific details yet on how the House Democrats, Senate, Republicans, or the White House will approach the infrastructure investment target, but this issue more than others represents campaign ground already staked out by Republicans as well. The infrastructure package has the greatest potential to draw bipartisan support because it is one of those bills with local benefits written all over it. What better way to run for reelection than on what you delivered in the form of federal dollars to repair and modernize ramps and highways, bridges, commuter systems, harbors, airports, and the like? There is a bit of trouble in paradise already, though, as Pelosi wants to move a monster infrastructure bill, while House Majority Leader Steny Hoyer (D-MD) favors an incremental approach using several smaller bills.

On the GOP side of the infrastructure coin, Trump routinely beats the drum loudly on infrastructure investment. The Republicans, however, are equally leery to roll out a plan or provide details because the challenge for both parties is how to pay for the investment. Higher gas taxes? Mileage taxes? Tolls? Road levies? Any or all of the above?

One piece of legislation originating in the Senate, but on which the House may put its mark, is a bill to provide certainty to businesses that lost several short-term federal tax credits and other benefits when Congress failed to extend those credits or include them in the 2017 tax code rewrite. Proof

Continued on page 53











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California Aims to Eliminate Diesel Fuel by 2030

California is long known to be aggressive in its environmental policies to ensure the Golden State has clean air and water for its nearly 40 million residents. Along with an existing cap and trade program and a low carbon fuel standard, its new governor has just set the bar pretty high by aiming to eliminate petroleum diesel emissions in California by 2030.

According to a new report from the California Advanced Biofuels Alliance (CABA), Governor Gavin Newsom's goal is achievable through growth in the market for clean, sustainable nonpetroleum diesel fuels. Transitioning to sustainable biofuels, which include biodiesel and renewable diesel, would represent a 71 percent decrease in greenhouse gas emissions—263 million metric tons—compared to those from petroleum diesel, the report states. The findings are contained in "A Roadmap for Eliminating Petroleum Diesel in California by 2030," an industry report on the impact and viability of sustainable fuels.

Use of biodiesel and renewable diesel, the two major types of sustainable diesel fuel, has grown rapidly since 2010, jumping from less than one percent to approximately 15 percent of all diesel fuel sold in California, the report states. California could realistically eliminate the use of petroleum diesel by 2030 through a combination of efficiency improvements, further electrification of vehicles currently using diesel, an increased use of renewable natural gas vehicles, and continued growth in the use of sustainable diesel fuels as shown in chart 1 from the report. Renewable diesel will account for 80 percent of the supply with biodiesel making up the remaining 20 percent. Renewable diesel and biodiesel are very similar in that they are made from second-use feedstocks such as vegetable oils, used cooking oil, and animal fats, feedstocks that are renewable rather than petroleum based. The primary difference is in how the fuels are processed from raw materials into sustainable diesel.

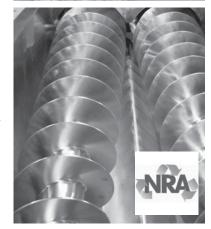
Renewable diesel first entered the California market in 2011 along with the introduction of the low carbon fuel standard. Since then, the volume of renewable diesel has grown rapidly, now satisfying about 10 percent of the state's total diesel



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needs. The report says continued infrastructure growth will be able to meet California's demand in 2030, including recent announcements of renewable diesel facility expansions in California, Wyoming, North Dakota, Louisiana, Singapore, and the Pacific Northwest, along with new facilities throughout the western United States, including Oregon, Washington, and two in neighboring Nevada.

Biodiesel can be used neat (100 percent) or blended with petroleum diesel and/or renewable diesel. Most biodiesel in California is blended and is limited by law to 20 percent of the fuel blend for general commercial use. In specialty applications nationwide, biodiesel is used in higher blends, up to 100 percent. CABA is forecasting biodiesel's portion of the California diesel market to significantly increase from its current level of 5 percent to 20 percent by 2030.

For the full report, visit www. caadvancedbiofuelsalliance.org.

The biggest concern on minds, though, is feedstock supply for the blossoming California market. CABA believes the nationwide growth momentum of 10 million gallons of biodiesel in 2000 to 2.5 billion gallons of both fuels today is irreversible and will continue as feedstock supply expands to accommodate the increasing demand for both renewable diesel and biodiesel.

California consumed 3.79 billion gallons of diesel in 2017, the most recent full-year data available from the California Energy Commission. Historically, California's diesel consumption has been highly correlated with economic growth. This can be seen during the past decade when diesel consumption peaked in 2007 at approximately 3.8 billion gallons, falling to approximately 3.3 billion gallons in 2009 when the economy was mired in the Great Recession before then rising again with a vigorous economy in 2011, thereafter sustaining a two percent annual growth rate into 2018.

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wo of the largest global events of 2018 were North and South Korea's commitment to formally end the Korean War and the June summit between United States (US) President Donald Trump and North Korean Supreme Leader Kim Jongun, the first ever meeting of these two nations' leaders. In a stand of unity, the North and South Korean Olympic athletes marched under one flag at the Winter Olympics in Seoul, South Korea. Several other events of note occurred in 2018. In Cuba, Miguel Diaz-Canel Bermudez was sworn in as president, ending 59 years of rule over the island nation by Fidel Castro. In the Middle East, Iraq had its first parliamentary elections and the Islamic State of Iraq and Syria was nearly pushed out of Syria. In May, millions around the world watched the royal wedding of Prince Harry and Meghan Markle at Windsor Castle.

In the United States, the median household income was projected to set a third consecutive record high in 2018 and the unemployment rate dropped to 3.7 percent, the lowest in more than 50 years. Last spring, Trump issued multiple proclamations adjusting imports of steel and aluminum into the United States under Section 232 of the Trade Expansion Act of 1962. These adjustments included both import duties and quotas, causing a trade war as US trading partners countered with retaliatory tariffs. On July 6, China imposed a 25 percent tariff on US soybeans, causing prices to drop 20 percent and animal protein meal prices soon followed. Rendered products were spared direct tariffs until September, when China enacted a 5 percent retaliatory tariff on US animal protein meals.

In August 2017, North America Free Trade Agreement renegotiations began. The National Renderers Association represented the rendering industry's interests in the process by testifying before a panel at the International Trade Commission, responding to *Federal Register* notices, holding face-to-face meetings with the office of the U.S. Trade Representative, and supporting agriculture coalitions in Washington, DC. The key message was "do no harm" to current trade. On November 30, 2018, a new trade deal, the United States-Mexico-Canada Agreement, was signed by leaders and must now be ratified by each country's legislature. The agreement would go into effect in 2020 at the earliest.

The International Monetary Fund (IMF) estimated the world's 2018 economic growth rate remained the same as 2017 at 3.7 percent. A slowdown toward the end of 2018 along with the effects of the current trade wars has led the IMF to forecast global growth will decline to 3.5 percent in 2019.

Domestic Developments

More Fat, Less Protein

US cattle slaughter in 2018 was 33 million head, up 2.5 percent from 2017, showing a strong upswing in the cattle cycle that started in 2016, and was the largest cattle slaughter since 2011. Average annual live weight increased from 1,349 pounds in 2017 to 1,350 pounds in 2018. The swine and poultry industries continued to grow as well, with hog slaughter at 124.4 million head, up 2.6 percent from 2017. Annual average live weight at slaughter increased slightly from 282 pounds in 2017 to 283 pounds last year. Broiler and mature chicken production was up 1.2 percent in 2018, totaling nearly 9.16 billion birds slaughtered while live weight increased from 6.20 to 6.26 pounds, continuing an upward trend of heavier birds at slaughter. Turkey slaughter fell 2 percent from 241.7 million birds in 2017 to 236.9 million last year, although average annual live weight per bird increased from 30.9 pounds in 2017 to approximately 31.1 pounds in 2018.

Production and consumption data for the rendering industry was historically reported in the US Census Bureau's M311K—Fats and Oils: Production, Consumption, and Stocks report. This report was discontinued in July 2011 after government cutbacks; however, in May 2015, the National Agricultural Statistics Service (NASS) statisticians released their first survey results for rendered product production. In 2016, NASS published its first full year of data hence 2016 through 2018 production in table 2 is data from the NASS Fats and Oils: Oilseed Crushings, Production, Consumption, and Stocks Annual Summary that is released every March. The 2013–2015 data in table 2 was derived using NASS monthly data as a baseline to derive historic production via the relationship between the production of rendered products and slaughter data. Yellow grease production in 2016 thereafter is NASS

data, but prior to 2016 it was calculated using the relationship between yellow grease production numbers in the 2010 report titled *A Profile of the North American Rendering Industry* from Informa Economics, and cooking oil consumption as reported by the US Department of Agriculture (USDA). Unfortunately, the NASS publication does not include consumption so data for animal fats use in biodiesel/renewable fuel production in table 2 is compiled from the Energy Information Agency (EIA) *Monthly Biodiesel Production Report*. Other consumption data was derived by subtracting production estimates from export estimates and biofuels use.

In 2018, production of rendered products totaled 10.2 million metric tons, down more than 2 percent from 2017. This is in contrast to the increase in cattle, pig, and chicken slaughter. The decrease in rendering production could be partially explained by raw material being diverted for other uses, such as fresh pet food, gel bone, and edible offal, along with the decrease in turkey slaughter.

Total animal fats produced last year was 5.7 million metric tons, up slightly from 2017, with tallow production up 3 percent from the previous year at nearly 2.7 million metric tons. This increase was led by strong growth in both technical and edible tallow production—technical tallow was up 8.6 percent compared to 2017 and edible tallow increased 9 percent during the same period. Inedible tallow production dropped less than one-tenth of a percent to more than 1.6 million metric tons in 2018. Even though hog slaughter was up in 2018, white grease production was down 1.8 percent to 737,000 metric tons, lard declined 5.6 percent to 149,400 metric tons, and choice white grease dropped less than 1 percent to 587,400 metric tons from 2017. Yellow grease/ used cooking oil production was more than 990,000 metric tons, up 8.5 percent from 2017. Other greases were down 22 percent in 2018 at 285,300 metric tons.

Animal protein meal production in 2018 dropped 5.5 percent from 2017 levels to 4.5 million metric tons, with meat and bone meal production down 4.8 percent to 2.6 million metric tons, poultry by-product meal down 4.9 percent to

just over 1.3 million metric tons, and feather meal down a significant 11 percent to 464,300 metric tons.

While imports of rendered products are not uncommon due to intra-North American trade along with lamb meal imports for pet food production, recent increases of animal fats and greases is due to biodiesel and renewable diesel demand in the United States. In 2018, overall imports of fat were 238,700 metric tons, up close to 43 percent from 2017. Over the past 5 years, US imports of animal fats and used cooking oil have grown 133 percent. On the animal protein meal side, imports were 108,900 metric tons in 2018, up 30 percent from 2017 and close to 50 percent over the last 5 years. More than 70 percent of the animal protein meal imported was lamb meal from Australia and New Zealand that is used in US pet food. Additionally, 13 percent of imports were from European Union countries, followed by 8 percent from Canada and 4 percent from Brazil. The United States also imported 420,000 metric tons of feather meal in 2018, down 35 percent from 2017.

Fats Demand Continues to Climb, Proteins Fall

As mentioned earlier in this report, NASS does not include domestic consumption in its monthly surveys so the data in table 2 is derived by adding production plus imports and subtracting biodiesel/renewable diesel inputs as reported by EIA and exports as reported by the Global Trade Atlas. Table 2 does not account for any carryover stocks.

Despite domestic consumption of rendered products being steady over the last 5 years, increasing an average of 1 percent, consumption in 2018 was down 1.3 percent to almost 8.5 million metric tons. Last year, total animal fats use in the United States for biodiesel/renewable fuel production was 1.4 million metric tons, up 19 percent from 2017; however, two "other" categories were not available in 2017. If animal fats use is adjusted for those two categories, which account for around 100,200 metric tons, the increase was 10.5 percent from 2017. At the same time, other domestic use of animal fats and used

Continued on page 13

Table 1. Average annual prices of select r	endered	products,	2013-2018	3 (per meti	ric ton)		
Product (Location)	2013	2014	2015	2016	2017	2018	% Change 17/18
Fats							
Beef tallow, packer (Chicago)	\$887	\$801	\$581	\$638	\$682	\$556	-18
Choice white grease (Missouri River)	\$846	\$711	\$498	\$537	\$549	\$463	-16
Edible tallow (Chicago)	\$946	\$865	\$638	\$714	\$762	\$690	-9
Edible tallow (Gulf)	\$966	\$803	\$563	\$746	\$731	\$662	-9
Lard (Chicago)	\$1,081	\$959	\$670	\$708	\$729	\$718	-2
Poultry fat (Mid-South)	\$793	\$660	\$502	\$546	\$605	\$566	-6
Yellow grease (Missouri River)	\$727	\$612	\$462	\$505	\$524	\$408	-22
Protein meals							
Blood meal, porcine (Midwest)	\$1,308	\$1,643	\$1,086	\$899	\$968	\$822	-15
Blood meal, ruminant (Missouri River)	\$1,232	\$1,580	\$1,070	\$857	\$931	\$790	-15
Feather meal (Mid-South)	\$701	\$772	\$521	\$391	\$437	\$497	14
Meat and bone meal, porcine (Missouri River)	\$527	\$556	\$377	\$314	\$314	\$308	-2
Meat and bone meal, ruminant (Missouri River)	\$464	\$502	\$359	\$294	\$273	\$263	-4
Poultry by-product meal, 57% protein (Mid-Sout	h) \$582	\$610	\$447	\$330	\$306	\$295	-4
Poultry by-product meal, 67% protein (Mid-Sout	h) \$821	\$871	\$602	\$614	\$688	\$721	5
Source: The Jacobsen.							

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Table 2. US production, imports, consumption, and exports of rendered products, 2013-2018 (000 metric to						netric tons)	
Category	2013	2014	2015	2016	2017	2018	% Change 17/18
Production					0.501.0		
Tallow	2,589.3	2,441.4	2,385.7	2,559.5	2,594.9	2,675.5	3.1
Inedible tallow	1,631.2	1,538.0	1,502.9	1,587.4	1,663.8	1,662.4	-0.1
Technical tallow	543.9	512.8	501.1	562.5	521.5	566.5	8.6
Edible tallow	414.3	390.6	381.7	409.6	409.6	446.5	9.0
Poultry fat	1,040.2	1,056.5	1,088.8	1,113.3	1,095.3	1,054.0	-3.8
Yellow grease/used cooking oil	896.4	933.2	926.4	916.4	913.0	990.7	8.5
White grease	718.0	707.3	758.7	787.6	750.5	736.8	-1.8
Choice white grease	567.6	559.2	599.8	620.3	592.3	587.4	-0.8
Lard	150.4	148.1	158.9	167.3	158.2	149.4	-5.6
Other greases	346.7	333.9	341.7	336.0	369.2	285.3	-22.7
Subtotal	5,712.8	5,472.3	5,501.3	5,712.8	5,722.9	5,742.3	0.3
Meat & bone meal	2,629.9	2,532.4	2,591.8	2,711.5	2,790.2	2,657.4	-4.8
Poultry by-product meal	1,365.6	1,387.1	1,429.4	1,382.1	1,438.8	1,368.1	-4.9
Feather meal	512.7	520.7	536.6	527.2	522.0	464.3	-11.1
Subtotal	4,508.2	4,440.2	4,557.9	4,620.8	4,751.0	4,489.8	-5.5
Total production	10,221.0	9,912.4	10,059.2	10,333.6	10,473.9	10,232.1	-2.3
Imports							
Tallow	59.5	62.6	64.0	78.9	99.8	139.4	39.7
Yellow grease/used cooking oil	20.6	17.2	22.4	23.0	38.7	62.9	62.5
White grease	21.8	20.8	34.4	28.8	27.0	35.8	32.6
Choice white grease	15.3	13.5	28.0	24.1	21.2	28.9	36.6
Lard	6.4	7.3	6.5	4.7	5.8	6.9	18.0
Poultry fat	0.4	0.4	0.6	0.6	1.9	0.6	-69.7
Subtotal	102.2	101.0	121.4	131.2	167.4	238.7	42.6
Meat & bone/poultry/porcine m		69.6	64.1	82.2	83.6	108.9	30.2
Feather meal	1.0	0.4	0.2	0.6	0.7	0.4	-35.2
Subtotal	74.7	70.0	64.3	82.8	84.3	109.3	29.7
Total imports	177.0	171.0	185.7	214.0	251.7	348.0	38.3
Consumption							
Feed, food, fatty acid,							
carryover, other	3,522.1	3,474.9	3,462.9	3,641.7	3,608.3	3,604.4	-0.1
Tallow	1,990.3	1,899.6	1,846.8	2,084.4	2,115.9	2,150.0	1.6
Poultry fat	952.6	959.0	983.7	999.4	1,000.9	979.4	-2.1
White grease	498.5	492.5	505.9	534.8	491.4	475.0	-3.3
Yellow grease*	80.6	123.7	126.5	23.1	0.0	0.0	
Biodiesel and renewable fuel	1,116.7	1,051.8	1,201.1	1,142.6	1,192.1	1,417.0	18.9
Animal fats	500.7	468.5	576.5	512.6	524.9	584.2	11.3
Tallow	205.0	161.0	195.0	150.6	176.5	219.5	24.4
Poultry fat	73.0	79.8	89.4	99.8	80.3	60.3	-24.9
White grease	211.4	213.6	267.2	262.2	268.1	280.3	4.6
Other	11.3	14.1	24.9	n/a	n/a	24.0	
Recycled oils	616.0	583.3	624.6	630.0	667.2	832.8	24.8
Yellow grease/used cooking		493.5	569.3	630.0	667.2	756.6	13.4
Other	140.6	89.8	55.3	n/a	n/a	76.2	
Subtotal	4,638.8	4,526.7	4,664.0	4,784.3	4,800.4	5,021.4	4.6
Meat & bone/poultry/porcine me		3,414.7	3,399.4	3,331.2	3,346.8	3,100.3	-7.4
Feather meal	334.8	355.1	449.8	464.2	442.5	354.9	-19.8
Subtotal	3,750.3	3,769.8	3,849.2	3,729.0	3,789.3	3,455.2	-8.8
Total consumption	8,389.1	8,296.5	8,513.2	8,513.3	8,589.7	8,476.6	-1.3
Exports							
Inedible tallow/technical tallow	382.3	402.5	343.1	283.3	324.6	327.5	0.9
Yellow grease	361.0	333.1	253.0	286.2	300.2	356.6	18.8
Edible tallow	71.1	40.8	64.8	120.1	77.7	117.9	51.8
Lard	29.4	21.4	19.8	19.1	17.2	16.8	-2.1
Choice white grease	0.5	0.6	0.2	0.4	0.8	0.4	-47.2
Poultry fat	14.9	18.2	16.4	14.7	16.1	14.8	-7.5
Subtotal	859.2	816.7	697.2	723.8	736.5	834.1	13.3
Meat & bone/poultry/porcine m		504.7	621.9	762.4	882.2	925.1	4.9
Feather meal	178.8	166.0	87.0	63.6	80.2	109.9	37.1
Subtotal	758.9	670.7	708.9	891.8	962.3	1,035.0	7.6
Total exports	1,618.1	1,487.3	1,406.1	1,615.6	1,698.8	1,869.1	10.0
Sources: Global Trade Atlas for exports							

Sources: Global Trade Atlas for exports, EIA for biodiesel inputs, and NASS Fats and Oils: Oilseed Crushings, Production, Consumption. and Stocks Annual Summary for 2018 production.

Notes: n/a-not available; *carryover stocks not included.

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cooking oil was up 1.6 percent in 2018 to reach approximately 2.2 million metric tons. Over the last 5 years, domestic use of animal fats and greases has increased 8 percent.

The increased demand for animal fats and used cooking oil in biodiesel and renewable diesel is being driven by the California Low Carbon Fuel Standard. Under this standard, these products are preferred due to their low carbon intensity (CI) scores over other feedstocks. Used cooking oil has some of the lowest CI scores, followed by distiller's corn oil, animal fats, and finally vegetable oils. To achieve California Air Resources Board reduction mandates for CI, biodiesel production is predicted to rise 150 percent and renewable diesel production 230 percent by 2030.

Domestic consumption of animal protein meals was a different story in 2018. Protein meal use was just under 3.5 million metric tons, down almost 9 percent from 2017. Over the last 5 years, domestic consumption has decreased 8 percent while production has remained relatively unchanged. As reported last year, this drop in domestic consumption was mainly due to the all-vegetarian diet trend in the broiler industry. It is estimated that between 25 and 30 percent of US broiler operations now use all-vegetarian diets, hence the supply/demand scenario for protein meals in the United States is critically off balance and shows the need to grow new markets for animal protein meals.

Overall rendered product exports in 2018 were almost 1.9 million metric tons, up 10 percent from 2017 and up 16 percent over the last 5 years. Of that, 1 million metric tons were protein meals and 834,000 metric tons were fats. This export growth was carried by a dramatic increase in protein meals while being offset by a decrease in fat exports. Over the last 5 years, animal protein meal exports grew 36 percent while fat exports dropped 3 percent.

Outlook Looks up—for Fats

As the cattle cycle rebounds and poultry and pork production continue to increase, there will be a greater supply of rendered products on the market. According to the USDA Agricultural Projections to 2028 report, the next 10 years of beef and poultry production is forecast to grow 10 percent and pork production 15 percent. Using these forecasts, animal protein and fat production can be estimated (chart 1). During the next 10 years, an increase of animal protein meals of approximately 937,000 metric tons and additional animal fats of 902,000 metric tons is projected.

The domestic demand for animal protein meals will continue to be influenced by the all-vegetarian diet trend. If this does not change, domestic demand for animal protein

meals and fats for livestock feed will either stabilize or continue to decline, hence the need for new markets for animal protein meals will be critical. Regarding animal fats and used cooking oil, as stated earlier, estimated demand from the biodiesel and renewable diesel industry is predicted to increase in the coming years. For instance, Diamond Green Diesel nearly doubled production in 2018 at its renewable diesel facility in Louisiana from 150 million gallons to 275 million gallons, with plans to expand to 550 million gallons, increasing its need for feedstock to more than 2 million metric tons. Therefore, the 10 year projected increase in animal fats production should be offset by added demand from the renewable diesel and biodiesel sectors. The projected increase in animal protein meal production, however, will need to be offset by expanding existing markets and finding new outlets for these products.

International Market Conditions

Proteins find Home in Exports

Global demand for protein meals continued to grow dramatically in 2018, coming from the livestock feed, aquatic feed, and pet food sectors. According to the 2019 Alltech Global Feed Survey, global feed production set a new record in 2018 by increasing 3 percent to more than 1.1 billion metric tons. The largest feed producer in the world is China, followed by the United States and Brazil. China is also the largest importer of feed ingredients in the world. In 2018, China produced 187.9 million metric tons of feed, up half a percent from 2017.

Total US meat and bone meal/poultry/porcine meal exports were up 4.9 percent in 2018 from the previous year.

Continued on page 15

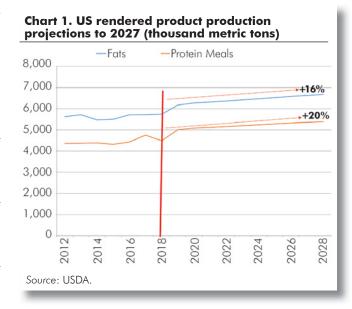


Table 3. US annual livestock and poultry slaughter, 2013-2018 (thousand head)							
Species	2013	2014	2015	2016	2017	2018	% Change 17/18
Broilers/Mature chickens	8,648,756	8,669,628	8,822,692	8,908,986	9,050,716	9,158,885	1.2
Cattle	32,462	30,266	28,843	30,578	32,189	33,000	2.5
Hogs	112,077	106,958	115,512	118,220	121,317	124,437	2.6
Turkeys	239,404	236,617	232,389	243,255	241,677	236,860	-2.0
Source: NASS.							

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Product/Country 2013 2014 2015 2016 2016 2018 20	Table 4. US export custom	ers by produc	t, 2013-2018	3 (metric ton	ıs)			
Mexico	Dreduct/Country	2012	2014	2015	2016	2017	2019	% Change
Mexico 28,079 235,843 227,876 145,636 126,624 88,421 -25.8 Cornodo 14,841 18,493 20,797 22,600 20,000 35,428 77,1 Morocco 5,000 9,000 7,000 7,198 6,450 13,500 113,52 Goutemalen 13,332 21,470 20,898 19,249 15,249 11,260 56,4 Nigeria 0 0 0 0 0 7,500 10,400 38,7 Colombia 3,899 6,100 8,000 0 1,856 9,200 395,7 Colombia 2,499 3,000 3,000 4,500 2,500 3,000 3,64 Honduras 14,097 11,499 9,000 8,240 5,641 3,370 40,3 El Salvador 41,199 3,750 2,900 3,000 1,200 5,64 Honduras 14,097 11,499 9,000 8,240 5,641 3,370 40,3 El Salvador 41,999 3,750 2,900 3,000 1,200 3,000 Nenezio 18,799 3,800 0 0 0 0 0 Haifi 43,19 8,348 917 250 2,000 0 100,0 Haifi 43,289 40,548 31,159 2,000 0 100,0 Horid 38,263 40,548 31,159 2,000 0 100,0 Total 38,263 40,548 31,159 32,150 3,160 3,160 Nerico 95,892 2,675 1,755 1,341 8,110 70,742 72,23 Mexico 95,893 2,693 1,604 11,133 10,40 11,133 11,134 24,407 38,388 37,3 Dominican Republic 18,082 15,518 9,585 10,639 9,652 1,743 1,75 Honduros 3,005 5,890 7,057 6,993 2,167 6,497 199,8 South Korea 50,991 7,200 13,100 13,68 13,111 3,511 189,9 South Korea 3,995 3,100 3,000 3,000 3,000 3,000 3,000 Norderia 3,88 439 55,600 3,000		2013	2014	2015	2010	2017	2016	17/10
Singapore 0 0,000 14,275 46,312 119,244 88,421 2.95.07 Conodo 1,4641 18,493 20,777 22,600 25,000 35,428 17,11 Morocco 5,000 9,000 7,000 7,198 6,450 113,50 113,20 Gualemala 13,332 21,470 20,449 20,094 15,249 13,600 16,56 Nigeria 0 0 0 7,500 11,200 365 Colombia 3,899 3,100 3,500 4,550 2,750 3,750 36,4 Honduras 14,097 11,499 9,00 3,200 12,00 50 58,3 40,33 Chine 0 0 0 0 0 0 0 0 0 0 3,500 1,500 1,500 3,500 1,500 3,500 1,500 1,500 3,500 1,500 3,500 1,500 3,500 1,500 3,500 1,500 3		239 070	225 242	227 276	1 45 626	126 624	124 550	7.0
Caraclade 1.4.8.41 18.4.93 20.7.90 20.000 3,000 3,032 3,7.12 Moracceo 5,000 9,000 7,000 7,198 6,450 13,750 1.0.8 Turkey 45,871 59,474 20,989 10,209 15,249 13,609 3.0 Colombia 3,899 6,100 8,000 0 7,500 11,609 39,7 Colombia 4,1997 9,000 3,000 15,641 3,370 -40,33 Hondures 14,097 11,499 9,000 8,240 5,641 3,370 -40,33 El Salvador 41,997 2,44 205 3,8 159 3,73 5-41 Venezuelo 18,799 3,800 9,1 2,9 2,900 0 0 100.0 Haiti 4,519 8,348 9,1 2,5 2,900 0 100.0 Venezuela 18,279 3,600 8,0 7,5 4,9 3,8 11,5 <td< td=""><td></td><td>•</td><td></td><td></td><td></td><td></td><td></td><td></td></td<>		•						
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European Union-28 147,289 153,813 128,128 185,000 176,004 169,134 -3.9 Singapore 2,593 2,675 1,755 1,541 8,110 70,742 772.3 Mexico 95,882 95,574 7,545 50,034 63,372 39,186 -88.2 Bosnia and Herzegovina 1,567 499 3,883 11,045 24,407 38,388 57.3 Dominican Republic 18,082 15,518 9,585 10,639 9,652 7,943 -17.7 Canada 11,533 10,604 11,716 9,073 7,747 7,825 10.7 Honduras 3,605 5,890 7,057 6,939 2,167 6,497 199.8 Jamaica 6,991 7,300 1,310 1,568 1,211 3,511 189.9 South Korea 3,799 7,125 6,066 651 1618 1,583 156.1 Ecuador 99 373 48 301 554	Total	382,263	402,548	343,115	283,280	324,586	327,503	0.9
Singapore 2,593 2,675 1,755 1,541 8,110 70,742 772.3 Mexico 95,892 95,574 72,564 50,034 63,372 39,186 -38.2 Bosnia and Herzegovina 1,567 499 3,883 11,045 24,407 38,388 57.3 Dominican Republic 18,082 15,518 9,585 110,639 9,652 37,933 1-1.7 Canada 11,533 10,604 11,716 9,073 7,747 7,825 1.0 Honduras 3,605 5,890 7,057 6,939 2,167 6,497 1,998 Jamaica 6,991 7,300 1,310 1,568 1,211 3,11 189,9 South Korea 502 552 961 1,350 307 3,205 944.0 China 144 276 955 1,796 1,552 2,333 195.5 China 3,893 439 293 1846 743 501 <th< td=""><td>Yellow grease (includes us</td><td>ed cooking oi</td><td>•</td><td></td><td></td><td></td><td></td><td></td></th<>	Yellow grease (includes us	ed cooking oi	•					
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Bosnia and Herzegovina 1,567 499 3,883 11,045 24,407 38,388 57.3 Dominican Republic 18,082 15,518 9,585 10,639 9,652 7,943 -17.7 Canada 11,533 10,604 11,716 9,073 7,747 7,825 1.0 Hondures 3,605 5,890 7,057 6,993 7,217 6,497 199.8 Jamaica 6,991 7,300 1,310 1,568 1,211 3,511 189.9 South Korea 502 552 961 1,350 307 3,511 189.9 South Korea 302 552 961 1,350 307 32,50 944.0 China 144 276 6,666 1,796 1,952 2,333 19.5 Guatemala 3,799 7,125 6,066 651 618 1,583 150.5 Colombia 383 439 593 1846 743 501 325	Singapore	2,593	2,675	1,755	1,541	8,110	70,742	772.3
Dominican Republic 18,082 15,518 9,585 10,639 9,652 7,943 -1.7.7 Canada 11,533 10,604 11,716 9,073 7,747 7,825 1.0 Honduras 3,605 5,890 7,057 6,939 2,167 6,497 199.8 Jamaica 6,991 7,300 1,310 1,568 1,211 3,511 189.9 South Korea 502 552 961 1,350 307 3,205 944.0 China 144 276 965 1,796 1,952 2,333 19.5 Guatemala 3,799 7,125 6,066 651 618 1,388 150.5 Colombia 388 439 593 1846 743 501 -32.6 Brazil 278 189 252 272 289 362 25.3 Nicaragua 1,052 1,932 712 187 452 429 362 25.3	Mexico	95,892	95,574	72,564	50,034	63,372	39,186	-38.2
Canada 11,533 10,604 11,716 9,073 7,747 7,825 1.0 Honduras 3,605 5,890 7,057 6,939 2,167 6,497 199.8 South Korea 6,991 7,300 1,310 1,568 1,211 3,511 189.9 South Korea 6,922 5525 961 1,350 307 3,205 944.0 China 144 276 965 1,796 1,952 2,333 19.5 Guatemala 3,799 7,125 6,066 651 618 1,583 156.1 Ecuador 99 3,73 48 301 554 1,388 156.1 Colombia 388 439 593 1846 743 501 -32.6 Brazil 278 189 252 272 289 362 253 Nicargua 1,052 1,932 71.7 1761 150 18.2 18.8 Edible tallow	Bosnia and Herzegovina	1,567	499	3,883	11,045	24,407	38,388	57.3
Honduras	Dominican Republic	18,082	15,518	9,585	10,639	9,652	7,943	-17.7
Honduras		11,533	10,604	11,716	9,073	7,747	7,825	1.0
Jamaica 6,991 7,300 1,310 1,568 1,211 3,511 189,9 South Korea 502 552 961 1,350 307 3,205 944,0 China 144 276 965 1,796 1,795 2,333 19,5 Guatemala 3,799 7,125 6,066 651 618 1,588 156,1 Ecuador 99 373 48 301 554 1,388 150,5 Colombia 388 439 593 1846 743 501 -32,6 Brazil 278 1,932 712 187 543 121 -77,7 Total 361,031 333,133 252,959 286,226 300,219 356,624 18.8 Belbetallow 3 35,840 61,076 114,154 72,120 113,527 57.4 Canada 4,870 3,687 61,076 114,154 72,120 113,527 57.4 Ca	Honduras							199.8
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	Total	14,895	18,173	16,376	14,728	16,051	14,842	-7.5

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Market Report Continued from page 13

In the last 5 years, exports in this category have grown 60 percent and are approaching 1 million metric tons. The global expansion of poultry, pet, and aqua feeds have led the demand surge. As fish meal production declines, for diets that require an animal protein, terrestrial animal protein meals are essential. Indonesia was the largest importer of US animal protein meals in 2018, importing 347,000 metric tons, a decline of 5 percent from 2017. China imported 199,000 metric tons of non-ruminant animal protein meals in 2018, up 21 percent from 2017 and 265 percent in the last 5 years. Exports of non-ruminant meals to Mexico dropped 13 percent when compared to 2017, to 112,400 metric tons.

Fat Exports Rebound

Total fat exports were 834,100 metric tons in 2018, up 13 percent from 2017. Exports of all rendered fats hit a historical low of 697,000 metric tons in 2015, but have since rebounded mostly due to overseas demand from biodiesel and renewable diesel. In 2018, exports of used cooking oil to Europe for biofuel use were 169,000 metric tons, up 15 percent over the last 5 years. In addition, exports of yellow grease to Singapore for renewable fuel production in 2018 reached 70,000 metric tons, up from 8,000 metric tons in 2017. Finally, tallow exports to Singapore for renewable diesel production,

although down, totaled more than 88,000 metric tons. Inedible tallow exports to traditional markets grew in 2018. Mexico, the largest importer, increased almost 8 percent last year, reaching 136,500 metric tons. Exports of tallow to traditional markets for soap production like Morocco, Turkey, and Nigeria grew 113, 56, and 39 percent, respectively.

Outlook

US rendered product production will continue to grow with increased livestock production (chart 1). Over the next 10 years, more than 937,000 metric tons of animal protein meals and 902,000 metric tons of animal fats are projected to be added into the supply chain. As mentioned earlier, the global demand for fat as a biodiesel and renewable diesel feedstock will continue to grow and offset the added supply. Additional international demand, however, will be needed to make up for the increased supply of animal protein meals because of the declining demand in the United States due to the allvegetarian diet trend in poultry. Aside from that, the global protein meal market is awash in an oversupply of soybean meal with carryover stocks and stock-to-use ratios at record highs. In addition, the trade war with China has depressed US protein meal prices and distorted the world marketplace. The key for animal protein meals will be to work at finding a niche in markets that demand these products, such as the aquaculture and pet food industries.

Table 4. US export custon	ners by produc	t, 2013-2018	3 (metric ton	s) (continue	d)		
Animal protein meals							
Indonesia	227,122	218,855	257,695	333,465	368,823	347,162	-5.9
China	54,483	63,174	81,400	138,088	164,515	199,034	21.0
Mexico	83,474	74,874	103,789	99,618	129,371	112,375	-13.1
Vietnam	1,780	1,613	8,214	28,414	39,528	65,834	66.6
Canada	43,368	48,690	58,743	64,292	66,435	54,462	-18.0
Chile	59,689	32,026	57,084	18,144	26,963	44,454	64.9
Philippines	29,704	12,462	10,734	9,203	6,518	23,609	262.2
Ecuador	9,786	10,299	8,470	11,550	15,808	22,182	40.3
Thailand	14,965	5,743	5,166	3,493	17,137	18,068	5.4
Malaysia	16,902	13,300	1,446	3,823	15,300	9,447	-38.3
Honduras	3,406	1,100	3,704	10,693	4,102	8,694	111.9
Peru	1,156	994	1,019	2,410	5,564	5,809	4.4
Myanmar	0	0	0	120	1,905	4,872	155.7
Sri Lanka	0	0	0	0	1,914	2,456	28.3
Cambodia	5,308	305	0	0	5,574	2,006	-64.0
Colombia	2,276	1,523	950	459	925	1,204	30.2
Jamaica	0	0	0	0	0	1,150	
Guatemala	12,595	7,399	1,381	4,130	2,934	915	-68.8
Bangladesh	3,425	1,505	3,820	1,501	771	409	-47.0
Total	580,072	504,726	621,890	762,404	882,151	925,119	4.9
Feather meal							
China	183	1,265	977	7,391	18,904	30,813	63.0
Chile	52,972	48,135	24,403	10,046	11,744	30,289	157.9
Indonesia	110,087	98,990	41,750	27,373	29,177	28,058	-3.8
Canada	8,961	16,227	15,573	16,872	18,297	15,093	-17.5
Vietnam	4,120	7	2,637	1,440	0	3,892	
Philippines	0	0	100	200	800	859	7.4
Peru	0	0	578	0	427	761	78.2
Total	178,815	165,952	87,000	63,580	80,179	109,891	37.1
Source: Global Trade Atlas.							

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Building Relationships

Among the pet food industry, renderers, and consumers

By Tina Caparella

Rendering and pet food are intertwined more now than ever before as both industries depend on one another to ensure healthy diets for pets worldwide. Building a relationship together, and with the consumers they service, is important. This was evident in mid-February at the annual International Production and Processing Expo (IPPE) held in Atlanta, Georgia, where the Pet Food Conference, sponsored by the American Feed Industry Association (AFIA), and International Rendering Symposium, put on by the National Renderers Association (NRA), were both well attended.

The global pet food industry has seen impressive development, according to Jared Koerten, Euromonitor International, with an average growth rate of six percent per year since 2013. This trend, however, should not to be taken for granted, Koerten told Pet Food Conference attendees, even though large corporations such as General Mills, Smuckers, and Archer Daniels Midland continue to show interest in the growing pet food industry as evidenced by the recent acquisitions of pet food companies Blue Buffalo, Aimsworth, and Neovia.

While global dog ownership continues the shift to smaller dogs that eat less food, global cat ownership has seen an annual average growth rate of six percent each year since 2013. Cats are better suited for modern life, especially in Asia and Latin America, where people lead busier lives and are located in urban areas.

Koerten described how North America remains the market giant in pet food sales whereas Asia is the "next frontier," with dog food sales in the United States (US) predicted to reach \$4 billion and cat food sales forecasted to be \$2 billion by 2023, both about one-third of total global sales. For dogs, the trend is more about value over volume due to small dog owners' preference for premium foods driving the average unit price up 18.5 percent. In Asia, cat treats are the biggest growth, averaging 23 percent over the past five years.

The humanization of pets and their food remains a driver in the industry, Koerten noted, with "all natural," "grain free," and "meat first" trends following human food. Pet food buyers are also influencing ethical business decisions, such as sustainable packaging and ingredient sourcing, as 60 percent of global consumers consider "recyclable" a trustworthy label on products. Pet food producers Mars and Nestle have invested heavily in sustainability practices that set standards for the next 20 years, including zero environmental impact from their operations and obtaining animal protein ingredients from sustainable sources. These and other pet food companies have joined the Pet Sustainability Coalition, which "envisions a thriving and collaborative pet industry that creates positive impact for the communities and environments where they do business."

Customization of pet foods has significantly evolved, with specific food formulations for breed, age, and allergies; therapeutic diets to address specific health conditions that are prescribed by veterinarians; and now personalized diets for a specific animal. Koerten summarized that the pet food market is healthy and growing, cat populations are accelerating, smaller dogs and a new generation are driving food premiumization, and ethics and sustainability are long-term objectives. "It's a lot to think about and digest," he concluded.

The export market for pet food manufactured in the United States isn't as rosy, according to AFIA's Gina Tumbarella. Although US pet food exports are consistent, the country's market share is declining while top exporter France remains stable and Germany's exports continue to grow. US pet food exports peaked in 2013 at 747 million metric tons valued at \$1.46 billion with a downward trend since; however, 2018 exports are on track to be higher than 2017. The top five export markets for US pet food are Canada, Japan (though declining significantly due to pet ownership changes), Mexico, Australia, and Hong Kong.

Tumbarella explained that US pet food strengths include supply availability and high quality products whereas its weaknesses are barriers related to bovine spongiform encephalopathy (BSE) and high pathogenic avian influenza. Despite the World Organization for Animal Health, or OIE, classifying the United States in 2012 as negligible risk for BSE, trade barriers for pet food containing ruminant material still exist, especially in Asia and particularly China.

"It's a very long process to regain lost markets after a disease outbreak," Tumbarella commented. She touched on the new United States-Mexico-Canada Agreement (USMCA) that awaits ratification in Congress, the US tariff issue with China, and a Japan trade agreement with the European Union (EU). One major hurdle for a United States-EU agreement is agricultural trade, something the EU will not include, showing that US trade objectives differ from the EU.

Other topics of discussion at the Pet Food Conference included block chain management for traceability of product, a technology Walmart has partnered with IBM that reduces traceability time of lettuce from around seven days to 2.2 seconds. One speaker provided an emotional overview of policy development and programming in support of service dogs for military veterans and children with cancer, while Dr. David Edwards of the Food and Drug Administration Center for Veterinary Medicine updated attendees on Food Safety Modernization Act (FSMA) inspections. He shared that

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current good manufacturing practice inspections have begun this year at large businesses, with routine preventive control inspections for small businesses beginning in the fall of 2019 and for very small businesses in fall 2020. Edwards noted that manufacturers should expect to be asked about consumer complaints, business volume, and customer and supplier lists to establish history and culture of the company. He thanked everyone for working hard at keeping the US food and feed supply safe.

Pet Food and Rendering Partnerships

About a decade ago, NRA was invited to sponsor an International Rendering Symposium at the end of IPPE and this year continued that tradition. Many speakers educated attendees about various aspects of the rendering industry, beginning with NRA President Nancy Foster. She discussed the top agriculture issues in Washington, DC, highlighting that exports of US bovine meat and bone meal into Mexico was part of the USMCA, potentially opening up a \$30 million market for US renderers. The trade deal still has to be approved by Congress and there are signs it could be in trouble due to the steel and aluminum tariffs imposed by the United States on Canada and Mexico. "Members are calling ag groups with questions," Foster commented.

In the recently approved 2018 farm bill, wording was included that specifies federal funding for food waste projects cannot disrupt existing business relationships and must follow the Environmental Protection Agency's Food Recovery Hierarchy pyramid, which indicates rendering is the "highest and best use" for food waste above anaerobic digestion and composting. This should protect the rendering industry as composting and waste-to-energy facilities seek out the raw materials renderers have long been collecting and processing into valuable commodities.

Ansen Pond, Pilgrim's Pride, presented the basics of the rendering process and what it offers, such as killing organic pathogens, reducing raw material volume by 60 percent, protecting the environment, recycling carbon to prevent greenhouse gas emissions, and recycling energy for use in animal feed or in biofuels. He showed the myriad of food safety and quality programs renderers must follow to ensure safe commodities that are also heavily regulated, emphasizing that the sustainability impact rendered products bring to pet food is a great story to tell the pet food customer.



A large group listens to Jared Koerten, Euromonitor International, discuss global pet food trends during the AFIA Pet Food Conference.

Sarah Hubler, Collings Nutrition Solutions, said consumers are concerned about sustainability and are hungry for information. A survey by the company found that when "pet parents" go looking for answers on the Internet, they find:

- nutrition information from bloggers with no nutrition background
- review site contributions written by other consumers with no training
- rhetoric from activists who are convinced pet food is killing pets

Communicating about pet nutrition is difficult due to consumers' high emotions, their own food beliefs, the abundance of misinformation on the Internet, and a lack of trust they have for "industry insiders." In an effort to find more effective ways of communicating factual nutrition information to consumers, Collings Nutrition Solutions discovered that pet parents love to watch random pet videos, so the company developed an animated dog named Satchmo, or "Mo" for short. They created a video and launched a website at www. moknows.org, a YouTube channel, and Facebook and Twitter accounts. Content for these platforms will include nutrition discussions, reviews on various pet foods, and fun pet activities for consumers.

"We think there is opportunity for our pets to 'talk' nutrition from pet parent to pet parent," Hubler stated. "Video content is underutilized in our industry. Viewers retain about 90 percent of what they hear in a video and only 10 percent if they read it."

Dr. Kurt Rosentrater, Iowa State University, presented early results of a life cycle assessment to understand the sustainability of a process, product, and pet food ingredient. He presented the methodology used (literature databases extensively researched), the sustainability metrics examined (greenhouse gases, acidification, and land and water use), and the comparison of meat products versus rendered products. The studies reviewed were all performed on farms and did not take transportation into account, but the key takeaways were the use of animal by-products in pet food results in substantially lower environmental impacts than the use of meat.

Relationships with the Research, Regulatory, and Trade Communities

Dr. Annel Green, Clemson University, provided an overview of the numerous research projects underway or completed at the Animal Co-Products Research and Education Center (ACREC) on behalf of the Fats and Proteins Research Foundation (FPRF). Since ACREC's inception at Clemson in March 2006:

- 136 rendering research projects have been conducted or are in progress
- at least 19 post-graduate students, 91 graduate students, and 350 undergraduate students have been directly involved in research projects related to rendering challenges, with many now employed in the rendering industry
- more than 2,500 undergraduate students have been introduced to the rendering industry through classroom instruction

Continued on page 18

Relationships Continued from page 17

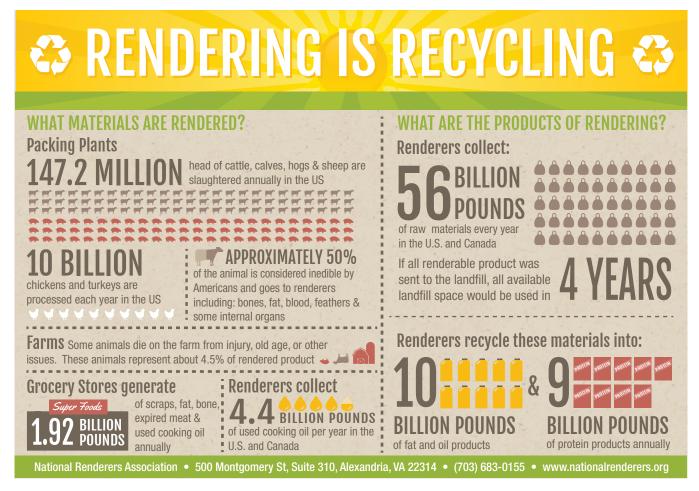
"This partnership is bringing in talent that is not currently in agriculture research," Green commented. Rendering research projects at ACREC/Clemson University include biodegradable plastic laminates for automobiles using animal protein meals, renderable gloves and bags for the meat processing industry that degrade during the rendering process, converting tallow and other animal fats to omega-3 fatty acids, and creating a potent antioxidant from blood products that also lead to further creating a flocculant product that is proving beneficial for wastewater treatment.

Dr. Michele Sayles, Diamond Pet Foods, discussed the newly developed Pet Food Alliance that brings together the rendering, meat, and pet food industries with researchers to collaboratively identify challenges and discuss realistic and implementable research solutions. Since 2017, several meetings have taken place to address sustainability, public perception, Salmonella and product safety, and oxidation issues. Participation in the alliance has grown 450 percent, showing the demand for such collaboration. To date, a bulk fat transportation survey has been drafted, the need to develop foreign material training videos and materials for employees has been identified, and six research proposals for hazard reduction have been received and are under review by the alliance. The next meeting will be held in Fort Collins, Colorado, June 26–28, following the American Meat Science Association's Reciprocal Meat Conference. More information is available at www.fprfalliance.agsci.colostate.edu.

Dr. Jeff Firman, University of Missouri, highlighted rendered animal protein and fat use in poultry nutrition, which has had a long and successful history of providing the nutrients needed at a competitive price. He showed how using computers for poultry feed formulation ensures balanced nutrients to ensure ideal protein levels at the best price. Richard Weeks of The Dupps Company provided symposium attendees with a look at modern rendering equipment. He emphasized that the rendering industry has been around a lot longer than the recycling and sustainability discussions of today.

Louise Calderwood, AFIA, examined the role of key state and federal regulatory players, stating that most state feed laws adopt some version of the American Association of Feed Control Officials' model bill and regulations. Dr. David Meeker, NRA Scientific Services, looked at FSMA's effect on the rendering industry. He emphasized that the rendering process inactivates any bacteria, viruses, protozoa, and parasites that are in raw materials collected, validated by research conducted at various universities, including Clemson, Colorado State, and Texas Tech. Meeker shared that the Animal Protein Producers Industry has developed videos and materials for employee training on meeting FSMA regulations.

Kent Swisher, NRA International Programs, wrapped up the symposium with an overview of international markets and trade for rendered products. US government data estimates meat production will continue to rise, leading to increased animal proteins and fats. He showed that world biodiesel and renewable diesel production is growing and using more animal fats and used cooking oil each year.



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and plasma products
Region: Central

APC Inc. - Dubuque 1300 Inland Lane P.O. Box 1398 Dubuque, IA 52003 Contact: Andy Etnyre Phone: 515-289-7688 Fax: 712-263-6772 Email: andy.etnyre@ functionalproteins.com Products: Spray-dried blood and plasma products Region: Central APC Inc. - Selma
1451 West Noble Street
Selma, NC 27576
Contact: Andy Etnyre
Phone: 515-289-7688
Fax: 712-263-6772
Email: andy.etnyre@
functionalproteins.com
Products: Spray-dried blood
and plasma products
Region: Central

APC Inc. - Sublette
1197 US Highway 83
Sublette, KS 67877
Contact: Andy Etnyre
Phone: 515-289-7688
Fax: 712-263-6772
Email: andy.etnyre@
functionalproteins.com
Products: Spray-dried blood
and plasma products
Region: Central

Product code key:

Blender - Fat and Proteins Blender of Fat BLP Blender of Protein Blood Meal ВM BR Broker Chemicals CH СМ Chicken Meal Consultant CWG Choice White Grease DL

Dry Rendered Tankage

EQ Equipment
ET Edible Tallow
EX Exporter
FA Fatty Acids
FGAF Feed Grade Animal Fat
FM Feather Meal

FM Feather Meal
HI Hide
IN Insurance
LG Lard/Grease
LT Laboratory/Testing
MB Meat and Bone Meal

MM Meat Meal PB Poultry By-p

PB Poultry By-product Meal PF Poultry Fat PM Poultry Meal RF Refined Fats SF Stabilized Animal Fats

ST Stabilized Animal Fats
SS Samplers and Surveyors
ST Storage Terminals
TG Tallow and Grease
YG Yellow Grease
OT Other

Boyer Valley Company

LGI Company 2425 S.E. Oak Tree Court Ankeny, IA 50021 www.boyervalley.com Contact: Walter Lauridsen Phone: 515-289-7600 Fax: 515-289-4369 Email: walter.lauridsen@ boyervalley.com Products: PBM,BM,FM,YG

Region: Central

Baker Commodities Inc. -Headquarters

4020 Bandini Boulevard Vernon, CA 90058-4274 Contact: James M. Andreoli Phone: 323-268-2801 Fax: 323-264-9862 Email: jandreoli@ bakercommodities.com Products: EX,RF,SF,TG,HI,MM, MB, FGAF, ST Region: Western

Baker Commodities Inc. -

Billerica P.O. Box 132 No. Billerica, MA 01862 Contact: Walter Gurschick Phone: 978-454-8811 Fax: 978-454-0448 Email: wgurschick@ bakercommodities.com Products: EX,SF,TG,FGAF,MM,

MB,ST Region: Eastern

Baker Commodities Inc.

Island Commodities 91-269 Olai Street Kapolei, HI 96707 Contact: Paul Tower Phone: 808-682-5844 Fax: 808-682-4389 Email: ptower@ bakercommodities.com Products: TG,MB Region: Western

Baker Commodities Inc. -

Kerman P.O. Box 416 Kerman, CA 93630-0487 Contact: Manuel Ponte Phone: 559-846-9393 Fax: 559-846-7671 Email: mponte@ bakercommodities.com Products: EX,FGAF,HI,MB,SF,TG Region: Western

Baker Commodities Inc. -

Los Angeles 4020 Bandini Boulevard Vernon, CA 90058-4274 Contact: Shelton Wang Phone: 323-268-2801 Fax: 323-268-5166 Email: swang@ bakercommodities.com Products: EX,RF,SF,TG,HI,MM, MB,FGAF,ST

Baker Commodities Inc. -

Phoenix P.O. Box 6518 Phoenix, AZ 85005 Contact: Beverly Norris Phone: 602-254-5971 or 602-275-3402 Fax: 602-272-1846 Email: bnorris@ bakercommodities.com Products: TG,MM,MB,SF,FGAF Region: Western

Baker Commodities Inc. -

Rochester 2268 Browncroft Boulevard Rochester, NY 14625-1050 Contact: Bill Schmieder Phone: 585-482-1880 Fax: 585-654-7070 Email: bschmieder@ bakercommodities.com Products: SF,TG,HI,MB,FGAF, BLP

Baker Commodities Inc. -

Region: Eastern

Region: Western

Seattle P.O. Box 58368 Seattle, WA 98138-1368 Contact: Mike Bulleri Phone: 206-243-7387 Fax: 206-243-3412 Email: mbulleri@ bakercommodities.com Products: EX,TG,MB,FGAF,HI, OT, Fish meal

Baker Commodities Inc. -

Spokane P.O. Box 11157 Spokane, WA 99211-1157 Contact: Joe Jacobson Phone: 509-535-5435 Fax: 509-536-3817 Email: jjacobson@ bakercommodities.com Products: SF,TG,HI,MB Region: Western

BHT ReSources

P.O. Box 1596 700 Maple Street, Suite A Birmingham, AL 35210 www.bhtonline.com Contact: T. Owen Vickers Phone: 205-252-1197 Fax: 205-251-1522 Email: tovickers@aol.com Products: TG,SF,FGAF,HI,MB,BFP Region: Eastern

Cargill - Headquarters

825 E Douglas Ave Wichita, KS 67202 www.caraill.com Phone: 316-291-2500 Email: david_mccullough@ cargill.com Products: EX,BM,DT,FGAF,HI MB,MM,SF,TG Region: Central

Cargill - Dodge City P.O. Box 1060 Dodge City, KS 67801 Products: BM,DT,FGAF,HI,MB,

MM,SF,TG Region: Central

Cargill - Fort Morgan P.O. Box 4100 Fort Morgan, CO 80701 Products: BM, DT, FGAF, HI, MB, MM,SF,TG

Region: Central Cargill - Friona

P.O. Box 579 Friona, TX 79035 Products: BM,DT,FGAF,HI,MB, MM,SF,TG

Region: Central

Cargill - Schuyler P.O. Box 544 Schuyler, NE 68661 Products: BM,DT,FGAF,HI,MB,

MM,SF,TG Region: Central

Cargill

P.O. Box 3850 High River, AB, T1V 1P4 Canada

Products: EX,BM,DT,FGAF,HI,

MB,MM,SF,TG Region: Western

Cargill

P.O. Box 188 Wyalusing, PA 18853 Products: SF,TG,MB,BFP,EX,BM Region: Eastern

Central Bi-Products

Farmers Union Industries LLC P.O. Box 319 Redwood Falls, MN 56283 www.fuillc.com Contact: Jerry Lupkes Phone: 507-641-3831 Fax: 507-637-5409 Email: jlupkes@centralbi.com Products: FM,PB,SF,TG,HI,MM, MB, DT, BFP, FGAF, BM, OT (Pet

Central Bi-Products

Region: Central

P.O. Box 359 Long Prairie, MN 56346 Contact: Tom Beseman Phone: 320-732-2819 Fax: 507-637-5409 Email: tbeseman@centralbi.com Products: FM,PB,SF,TG,HI,MM, MB,PM,BFP,FGAF,BM,OT(Pet food) Region: Central

Farmers Union Industries LLC

Central Bi-Products

Farmers Union Industries LLC 1842 Highway 4 Estherville, IA 51334 Contact: Sheldon Andrews Phone: 712-362-2901 Email: sandrews@centralbi.com Products: FM,PB,SF,TG,HI,MM, MB,PM,BFP,FGAF,BM,OT(Pet food)

Region: Central

Caviness Beef Packers LLC

P.O. Box 790 Hereford, TX 79109 www.cavinessbeef.com Contact: Terry Caviness Phone: 806-357-2333 Fax: 806-357-2377 Email: terry@cavinessbeef.com Products: HI,MB,BM,Tallow Region: Central

CS Beef Packers LLC

17365 S. Cole Road Kuna, ID 83634 www.csbeefpackers.com Contact: Steve Cherry Phone: 208-810-7510 Email: steve.cherry@

csbeef.com

Products: HI,MB,BM,Tallow

Region: Central

Darling Ingredients Inc. -**Headquarters**

251 O'Connor Ridge Blvd., Suite 300 Irving, TX 75038 www.darlingii.com Phone: 972-717-0300 Fax: 972-717-1588 Email: info@darlingii.com Region: Central, Western, Eastern

Darling Ingredients Inc.

P.O. Box 615 Des Moines, IA 50306 www.darlingii.com Phone: 515-288-2166 Fax: 515-288-1007 Region: Central, Western, Eastern

Darling Ingredients Inc.

4221 Alexandria Pike Cold Spring, KY 41076 www.darlingii.com Phone: 859-781-2010 Fax: 859-572-2575 Region: Central, Western, Eastern

Nature Safe

Part of Darling Ingredients Inc. 4221 Alexandria Pike Cold Spring, KY 41076 Contact: Mike Manning Phone: 859-344-2230 Email: mmanning@ darlingii.com Products: Organic fertilizers

Region: Eastern

Region: Western

Rothsay

A Division of Darling International Canada Inc. 485 Pinebush Road, Unit 101 Cambridge, ON, N1T 0A6 Canada www.rothsay.ca

Phone: 519-780-3342 Fax: 519-780-3360 Region: Central

For rendered fat sales

DAR PRO Ingredients, a Darling Brand

www.darpro-ingredients.com Contact: Steve Thomas Phone: 859-572-2546 Fax: 972-717-1959 Email: fats-proteins@ darpro.com Products: BLF,BR,CN,DL,EQ,ET, EX,FGAF,HI,LT,RF,SF,ST,TG,YG, OT (bio-based diesel)

For rendered protein sales

DAR PRO Ingredients, a Darlina Brand

www.darpro-ingredients.com Contact: Mitchel McGee Phone: 877-659-8438 Fax: 859-781-2569 Email: fats-proteins@ darpro.com Products: BLP,BM,CM,EQ,EX, PB,PM,FM,LT,MB,MM,OT (Organic fertilizer, specialty

For restaurant services

DAR PRO Solutions, a **Darling/Griffin Brand**

proteins, flavor enhancers)

www.darpro-solutions.com Contact: Todd Mathes Phone: 972-717-0300 Fax: 972-717-1588 Email: recyclingservices@ darpro.com

Rousselot

Part of Darling Ingredients Inc. 1231 S. Rochester Street, Suite 250 Mukwonago, WI 53149 www.rousselot.com Contact: Raymond Merz Phone: 262-363-6051 Fax: 262-363-2789 Email: raymond.merz@ rousselot.com

Products: Gelatin, hydrolyzed

collagen

Sonac USA LLC

Part of Darling Ingredients Inc. 1299 E. Maple Street Maquoketa, IA 52060 www.sonac.biz Contact: Ryan Tranel Phone: 563-690-1168 Fax: 563-652-6633 Email: ryan.tranel@ darlingii.com Products: Spray-dried blood and plasma products, gelatin, hydrolyzed collagen, protein isolates, other functional proteins Region: Central

Foster Farms

P.O. Box 457 Livingston, CA 95334 www.fosterfarms.com Contact: Dennis Richmond Phone: 318-368-4344 Email: dennis.richmond@ fosterfarms.com Products: PM,FM,PF,CM,OT

(organic fertilizers) Region: Western

G.A. Wintzer & Son Co.

204 W. Auglaize Street P.O. Box 406 Wapakoneta, OH 45895 www.gawintzer.com Contact: Gus Wintzer Phone: 419-739-4900 Fax: 419-738-9058 Email: gus.wintzer@ gawintzer.com Products: EX,RF,SF,TG,FGAF,HI, MB,FM,PB

Region: Eastern

Gelita USA Inc.

Gelita AG 2445 Point Neal Road Sergeant Bluff, IA 51054 www.gelita.com Contact: Shaun Billiet Phone: 712-943-1652 Fax: 708-891-8432 Email: shaun.billiet@ aelita.com Products: MB,SF,Gelatine Region: Central

Gelita USA Inc.

10 Wentworth Avenue Calumet City, IL 60409 www.gelita.com Contact: Gina Swanson Phone: 712-943-0310 Fax: 712-943-3372 Email: gina.swanson@ gelita.com Products: MB,SF,Gelatine Region: Central

Holmes By-Products Inc.

3175 T.R. 411 Millersburg, OH 44654 Contact: Abe L. Miller or Dennis Koshmider Phone: 330-893-2322 Fax: 330-893-2321 Products: SF,HI,MM,MB,PB,FM

Region: Eastern

Hormel Foods Corp.

1 Hormel Place Austin, MN 55912-3680 Contact: Mike Vandertie Phone: 507-437-5207 Email: mdvandertie@ hormel.com Products: MB,HI,SF,BM,Lard, Deodorized edible lard/tallow Region: Central

Hormel Foods - Austin 500 14th Avenue NE Austin, MN 55912 Contact: Dean Steines Phone: 507-437-5373 Fax: 507-437-5524 Email: dwsteines@hormel.com Products: MB,HI,SF,BM,Lard, Deodorized edible lard/tallow

Region: Central

Hormel Foods - Fremont

900 S. Platte Avenue Fremont, NE 68025 Contact: Jim Akemann Phone: 507-437-5264 Fax: 507-437-5167 Email: jeakemann@hormel.com

Products: MB,HI,SF,BM,Lard Region: Central

JBS Swift & Company -**Headquarters**

1770 Promontory Circle Greeley, CO 80634-9039 Contact: Jim Fisher Phone: 970-506-8354 Fax: 970-506-8320 Email: jim.fisher@jbssa.com Products: TG,RF,HI,MBM,BM,EX Region: Western

Plant locations

JBS Swift & Company

800 N. 8th Avenue Greeley, CO 80634 Contact: Keith Neddermever Phone: 970-304-7247 Fax: 970-304-7320 Email: keith.neddermeyer@ ibssa.com Products: TG,HI,MB,BM,EX

Region: Western

JBS Swift & Company

410 N. 200 W Hyrum, UT 84319 Contact: Elton Varner Phone: 435-245-6456 Fax: 435-245-5207

Email: elton.varner@jbssa.com Products: TG,RF,HI,MBM,BM,EX

Region: Western

JBS Swift & Company

P.O. Box 2137 Grand Island, NE 68801 Contact: Steve Caravan Phone: 308-384-5330 Fax: 308-389-4834 Email: steve.caravan@jbssa.com Products: TG,HI,MB,BM,EX Region: Central

JBS Swift & Company

P.O. Box 524 Dumas, TX 79029 Phone: 806-966-5103 Fax: 806-966-5481 Products: TG,HI,MB,BM,EX Region: Central

JBS Swift & Company

1200 Story Avenue Louisville, KY 40206 Contact: Dave Dewitt Phone: 502-582-0235 Fax: 502-582-6295 Products: TG,MBM,BM Region: Eastern

JBS Swift & Company

North & 10th Avenue Marshalltown, IA 50158 Contact: Jon Holden Phone: 641-752-7131 Fax: 641-752-8509 Email: jon.holden@jbssa.com Products: TG,MBM,BM Region: Central

JBS Swift & Company

1700 N.E. Highway 60 Worthington, MN 56187 Contact: Kevin Schweigert Phone: 507-372-2121 Fax: 507-372-4611 Email: kevin.schweigert@ jbssa.com Products: TG,MBM,BM Region: Central

Mountain View Rendering Company

JBS Souderton Inc. 173 Rocco Road Edinburg, VA 22824 Contact: Jason Janita Phone: 540-984-4158 ext. 239

Fax: 540-984-4159

Email: jason.janita@jbssa.com Products: SF,FM,PB,PF,BM,

FGAF,OT Region: Eastern

JBS - MOPAC

JBS Souderton Inc. P.O. Box 64395 Souderton, PA 18964 Contact: Ken Gilmurray Phone: 215-703-6085 Email: ken.gilmurray@ ibssa.com

Products: BLF,BLP,FGAF,SF,TG,

EX,LT,MB,PB,BM Region: Eastern

JBS Packerland Tolleson

651 S. 91st Avenue Tolleson, AZ 85353 Contact: Jeremy Eatherton Phone: 970-506-8355 Email: jeremy.eatherton@ ibssa.com

Products: DT,HI,MB,SF,TG Region: Western

JBS Packerland Green Bay

P.O. Box 23000 Green Bay, WI 54305 Contact: Jim Holly Phone: 970-506-8355 Products: DT,HI,MB,SF,TG Region: Central

Pilgrim's Pride Corp. -**Rendering Headquarters**

P.O. Box 1268 Mt. Pleasant, TX 75456 www.pilgrims.com Contact: Mark Glover Phone: 903-434-1190 Fax: 972-290-8345 Email: mark.glover@ pilgrims.com

Products: SF,FM,BM,PF,PM Region: Central

Plant locations

Pilgrim's Pride Corp. -

Broadway 330 Co-Op Drive Timberville, VA 22853 Contact: Hal Davis Phone: 540-901-6130 Fax: 540-901-6181 Email: hal.davis@pilgrims.com Products: SF,PM,FM,PB,PF Region: Eastern

Pilgrim's Pride Corp. -

Moorefield 129 Potomac Avenue Moorefield, WV 26836 Contact: Hal Davis Phone: 304-538-7834 Fax: 304-538-3540 Email: hal.davis@pilgrims.com Products: SF,PM,FM,PF,PB Region: Eastern

Pilgrim's Pride Corp. -

Mt. Pleasant 1220 Pilgrim Street Mt. Pleasant, TX 75455 Contact: Bill Welborn Phone: 903-575-3284 Fax: 903-575-3911 Email: bill.welborn@ pilgrims.com

Products: SF,PM,FM,BM,PB,PF

Region: Central

Pilgrim's Pride Corp. -

Sumter 2050 Highway 15 South Sumter, SC 29150-8799 Contact: Nick Wilen Phone: 803-481-6265 Fax: 803-481-4263 Email: nick.wilen@ pilgrims.com Products: SF,PM,FM,PB,PF

Region: Eastern

John Kuhni Sons Inc.

P.O. Box 15 Nephi, UT 84648 Phone: 435-758-7600 Fax: 435-758-7610 Products: SF,TG,HI,MB,FGAF, OT(Transporter) Region: Western

Kaluzny Bros. Inc.

1528 Mound Road Joliet, IL 60436-9808 Contact: David Kaluzny II Phone: 815-744-1453 Fax: 815-729-5069 Email: dkaluzny2@aol.com Products: SF,TG,DT,BLF,FGAF,

HI,CWG,YG Region: Central

Region: Eastern

Maple Lodge Farms Ltd.

8301 Winston Churchill Blvd. Brampton, ON, L6Y 0A2 Canada Contact: David Willison Phone: 905-455-8340 x 2359 Fax: 905-455-8370 Email: dwillison@ maplelodgefarms.com Products: SF,PB,FM

Mendota Agri-Products Inc. - Headquarters

712 Essington Road Joliet, IL 60435 www.mendotaagriproducts.com Contact: John Mahoney Phone: 815-730-2080 Fax: 815-730-2087 Email: johnm@ mahoneyes.com Products: BLF,DT,FGAF,SF,TG,YG Region: Central

Mendota Agri-Products Inc.

P.O. Box 439, 448 N. 3973 Road Mendota, IL 61342 www.mendotaagriproducts.com Contact: John Setchell Phone: 815-539-5633 Fax: 815-539-7943 Email: johns@mendag.com Products: BLF, DT, FGAF, SF, TG, MB,YG

Region: Central

Mahoney Environmental

712 Essington Joliet, IL 60435 www.mahoneyenvironmental.com Contact: Rick Sabol Phone: 815-302-3912 Fax: 815-730-2087 Email: ricks@mahoneyes.com Product codes: BLF,FGAF,LG, YG,TG

Mountaire Farms of Delaware

Mountaire Corporation P.O. Box 1320 29093 John J. Williams Hwy Millsboro, DE 19966 www.mountaire.com Contact: Brian Schoeberl Phone: 302-934-4178 Fax: 302-934-3445 Email: bschoeberl@ mountaire.com Products: SF,PB,FM Region: Eastern

National Beef Packing Company LLC -Headquarters

P.O. Box 20046 Kansas City, MO 64195-0046 www.nationalbeef.com Contact: Doyle Leefers or Tyler Nicholson Phone: 800-449-2333 Fax: 816-713-8859 Email: doyle.leefers@ nationalbeef.com or tvler.nicholson@ nationalbeef.com Products: SF,TG,HI,MM,MB, BM,EX

National Beef - Dodge City

2000 E. Trail Street Dodge City, KS 67801 Contact: Needham Carswell Phone: 620-338-4253 Fax: 620-338-4339 Email: needham.carswell@ nationalbeef.com Products: SF,TG,HI,MM,MB, BM,EX

Region: Central

Region: Central

National Beef - Liberal

P.O. Box 978 Liberal, KS 67905 Contact: Austin Boggs Phone: 620-626-0692 Email: austin.boggs@ nationalbeef.com

Products: SF,TG,HI,MM,MB,

Region: Central

Nutri-Feeds Inc.

101 SE 11th Avenue Amarillo, TX 79101 Contact: Garth Merrick Phone: 806-350-5525 Fax: 806-357-2292 Email: garth@ merrickpetcare.com Products: TG,MB Region: Central

Protein Products Inc. -**Headquarters**

P.O. Box 2974 Gainesville, GA 30503 www.proteinproductsinc.com Contact: Jeff Gay Phone: 770-536-3922 Fax: 770-536-8365 Email: jeffg@ppicorp.com Products: Fish meal and fish oil Region: Eastern

Protein Products Inc.

1042 Highway 3 Sunflower, MS 38778 www.proteinproductsinc.com Contact: Eric Hilley Phone: 770-536-3922 Fax: 770-536-8365 Email: erich@ppicorp.com Region: Eastern

Rantoul Foods LLC

205 Turner Drive Rantoul, IL 61866 Contact: Mike Welu Phone: 217-892-4178 Email: mikew@ rantoulfoods.com Products: LG,MB Region: Central

Sacramento Rendering Company

SRC Companies 11350 Kiefer Boulevard Sacramento, CA 95830 Contact: Michael Koewler Phone: 916-363-4821 Fax: 916-363-8641 Email: michaelkoewler@ aol.com

Products: EX,SF,TG,HI,MM,MB,

DT,FGAF,BFP Region: Western

Reno Rendering

SRC Companies 1705 N. Wells Avenue Reno, NV 89512 Phone: 800-733-6498 Products: Transfer station Region: Western

24 April 2019 Render

Sanimax - Headquarters

9900 Maurice-Duplessis Montreal, QB, H1C 1G1 Canada www.sanimax.com Contact: Martin Couture

Phone: 514-648-6001 or 888-495-9091 Fax: 514-648-3013 Email: info@sanimax.com

Region: Eastern

Sanimax

P.O. Box 45100 2001 Avenue de La Rotonde Charny, QB, G6X 3R4 Canada

www.sanimax.com Contact: Vincent Brossard Phone: 418-832-4645, x3190 Fax: 418-832-6995

Email: info@sanimax.com Products: EX,FM,PB,SF,TG,BM, RF,FGAF,BLF,HI,PM

Region: Eastern

Sanimax

9900 Maurice-Duplessis Montreal, QB, H1C 1G1 Canada www.sanimax.com Contact: Eric Caputo Phone: 514-648-6001, x3249 Fax: 514-648-0597 Email: info@sanimax.com Products: EX,FM,PB,SF,TG,BM, RF,FGAF,BLF,HI,PM Region: Eastern

Sanimax

P.O. Box 10067 2099 Badgerland Drive Green Bay, WI 54303 www.sanimax.com Contact: Donn Johnson Phone: 920-494-5233 Fax: 920-494-9141 Email: info@sanimax.com Products: EX,SF,TG,HI,DT,FGAF, MB,BFP

Sanimax

Region: Central

505 Hardman Avenue South St. Paul, MN 55075 www.sanimax.com Contact: Donn Johnson Phone: 651-451-6858 Fax: 651-451-6542 Email: info@sanimax.com Products: EX,SF,TG,MB,BM, MM,FGAF,FM,PB,HI,BFP,RF Region: Central

Sanimax

605 Bassett Street
DeForest, WI 53532
www.sanimax.com
Contact: Donn Johnson
Phone: 920-494-5233
Fax: 920-494-9141
Email: info@sanimax.com
Products: SF,TG,FGAF
Region: Central

Simmons Feed Ingredients

10700 S. State Highway 43 Southwest City, MO 64863 www.simmonsfeedingredients.com Contact: Ken Wilson Phone: 417-762-3001 Fax: 417-762-3867 Email: ken.wilson@ simfoods.com Products: SF,PB,PM,FM Region: Central

Smithfield - Sales 111 Commerce Street Smithfield, VA 23430 Contact: Gregg Redd Phone: 757-357-1636 Fax: 757-357-1624 Email: gredd@smithfield.com Products: SF,RF,HI,LG,MM,MB, BM,EX,OT(Heparin, plasma, runners, hydrolized hog hair) Region: Eastern

Smithfield - Clinton 424 E. Railroad Street Clinton, NC 28328 Contact: Andrew Jordan Phone: 910-385-7751 Fax: 910-299-3001 Email: ajordan@ smithfield.com Products: SF,RF,HI,LG,MM,MB, BM,EX,OT(Heparin, plasma, runners, hydrolized hog hair) Region: Eastern

Smithfield - Crete 2223 County Road I Crete, NE 68333 Contact: Henry Jaimes Phone: 402-826-8885 Email: hjaimes@smithfield.com Products: SF,RF,HI,LG,MM,MB, BM,EX,OT(Heparin, plasma, runners, hydrolized hog hair) Region: Central

Smithfield - Dennison 800 Industrial Drive Dennison, IA 51442 Contact: Ron Pankau Phone: 800-831-1812 Email: rpankau@ smithfield.com Products: SF,RF,HI,LG,MM,MB, BM,EX,OT(Heparin, plasma, runners, hydrolized hog hair) Region: Central

Smithfield - Kansas City 11500 NW Ambassador Drive Kansas City, MO 64195 Contact: Austin Angel Email: aangel@smithfield.com Products: SF,RF,HI,LG,MM,MB, BM,EX,OT(Heparin, plasma, runners, hydrolized hog hair) Region: Central Smithfield - Milan 22123 Highway 5 Milan, MO 63556 Contact: Gary Banner Phone: 660-865-4061 Email: gbanner@ smithfield.com Products: SF,RF,HI,LG,MM,MB, BM,EX,OT(Heparin, plasma, runners, hydrolized hog hair) Region: Central

Smithfield - Monmouth 1220 N. 6th Street Monmouth, IL 61462 Contact: Scott Peel Phone: 309-299-4753 Email: speel@smithfield.com Products: SF,RF,HI,LG,MM,MB, BM,EX,OT(Heparin, plasma, runners, hydrolized hog hair) Region: Central

Smithfield Foods - North 501 N. Church Street Smithfield, VA 23430 Contact: Scott Piper Phone: 910-818-2924 Email: spiper@smithfield.com Products: SF,RF,HI,LG,MM,MB, BM,EX,OT(Heparin, plasma, runners, hydrolized hog hair) Region: Eastern

1400 N. Weber Avenue Sioux Falls, SD 57103 Contact: Don Johnson Phone: 605-330-3295 Email: djohnson@ smithfield.com Products: BFP,TG,FGAF,MM, EX,OT(Pet food meat products) Region: Central

Smithfield - Sioux Falls

Smithfield - Tar Heel 15855 Highway 87 West Tar Heel, NC 28392 Contact: Ted Stafford Phone: 910-879-5758 ext. 758 Email: tstafford@ smithfield.com Products: SF,RF,HI,LG,MM,MB, BM,EX,OT(Heparin, plasma, runners, hydrolized hog hair) Region: Eastern

Smithfield - Vernon 3049 E. Vernon Avenue Los Angeles, CA 90058 Contact: Gregg Redd Phone: 757-635-7782 Email: gredd@smithfield.com Products: SF,MB,BM,Lard Region: Western

Coastal Protein

1600 Martin Road Godwin, NC 28344 Contact: Blake Bullard Phone: 910-567-5604 Email: bbullard@ coastalproteins.com Products: MM,LG Region: Eastern

Pine Ridge Farms

1800 Maury Street Des Moines, IA 50317 Contact: Brady Stewart Phone: 515-266-4100 Email: bstewart@ pineridgefarmspork.com Products: MM,LG Region: Central

South Chicago Packing Company

16250 S. Vincennes Avenue South Holland, IL 60473 www.miniat.com Contact: Mike Botelho Phone: 708-589-2432 Fax: 708-589-2532 Email: mbotelho@miniat.com Products: ET,RF,SF,TG,EX Region: Central

Tyson Foods Inc. -Headquarters

2200 Don Tyson Parkway, CP721 Springdale, AR 72762 www.tyson.com Contact: Bo Watson Phone: 479-290-2897 Fmail: bo watson@tyson.co

Email: bo.watson@tyson.com Products: FM,PB,PM,PF,OT Region: Central

Plant locations

Cullman Blending

P.O. Box 1144 Cullman, AL 35055 Contact: Mike Lankford Phone: 256-734-7100 Fax: 256-734-4521

Pine Bluff Blending

4211 Emmett Sanders Road Pine Bluff, AR 71601 Contact: Mike Lankford Phone: 870-534-7276 Fax: 870-534-7273

RVI - Alma 1255 US Highway 1 South Alma, GA 31510 Contact: Brandon Kyzar Phone: 229-317-2629

RVI - Blends 2305 O'Kelly Drive Gainsville, GA 30501 Contact: Bryan Kattelmann Phone: 770-535-6646

RVI - Clarksville 1238 Market Street Clarksville, AR 72830 Contact: Keith Yovonavick Phone: 479-754-3441 Fax: 479-754-8018 **RVI -** Cumming 4990 Leland Drive Cumming, GA 30041 www.americanproteins.com Contact: Brandon Kyzar Phone: 229-317-2629

RVI - Cuthbert P.O. Box 528 Cuthbert, GA 31740 Contact: Brandon Kyzar Phone: 229-317-2629

RVI - Forest 11634 Hwy 80 W Forest, MS 39074 Contact: Reed Kilpatrick Phone: 601-469-8301 Fax: 479-717-0198

RVI - Hanceville P.O. Box 429 Hanceville, AL 35077 Contact: Jason Spann Phone: 256-677-3941

RVI - Harmony 501 Sheffield Road Harmony, NC 28634 Contact: Gregg Wikstrom Phone: 704-546-2602 Fax: 704-546-5944

RVI - Robards (Henderson) 14660 U.S. Hwy 41 S Robards, KY 42452 Contact: Mark Badertscher Phone: 270-521-3160 Fax: 270-521-3181

RVI - *Scranton* 7755 N. Hwy 393 S Scranton, AR 72863 Contact: Jim Rofkahr Phone: 479-938-2025 Fax: 479-757-7731

RVI - Sedalia 20003 Menefee Road Sedalia, MO 65301 Contact: Ben Wilson Phone: 660-826-7071 x1 Fax: 660-826-7119 Email: benjamin.wilson@ tyson.com

RVI - Seguin 1200 W. Kingsbury Street Seguin, TX 78155 Contact: Frank Fox Phone: 830-401-8842 Fax: 479-203-4221

RVI - Temperanceville 11224 Lankford Hwy Temperanceville, VA 23442 Contact: Tim Johnson Phone: 757-824-3471 Fax: 757-854-1415

RVI - Texarkana 5465 Miller County 64 Texarkana, AR 71854 Contact: Dan Crowe Phone: 870-645-2693 Fax: 870-645-2619 **Tyson Fresh Meats**

800 Stephens Port Drive, DD828D Dakota Dunes, SD 57049 Contact: Bob Bestgen or Kim Broekemeier Phone: 605-235-2523 or 605-235-2836 Fax: 479-757-7595 or 479-757-7547 Email: bob.bestgen@tyson.com or kim.broekemeier@tyson.com

Plant locations

Beef sites: Amarillo, TX Dakota City, NE Holcomb, KS Joslin, IL Lexington, NE Pasco, WA

Pork sites:
Columbus Junction, IA
Denison, IA
Madison, NE
Perry, IA
Storm Lake, IA
Logansport, IN
Waterloo, IA

Valley Proteins Inc. -Headquarters

P.O. Box 3588
Winchester, VA 22604-2586
www.valleyproteins.com
Contact: Gerald F. Smith Jr.
Phone: 540-877-2590
Fax: 540-877-3210
Email: jismith@
valleyproteins.com
Products: BFP,BM,CM,EX,FGAF,FM,HI,MM,PF,PM,SF,TG,YG,OT(Pet food meat products, turkey meal)
Region: Eastern

Valley Proteins Inc. -

Amarillo Division
8415 S.E. 1st Avenue
Amarillo, TX 79118-7302
Contact: Tom Green
Phone: 540-877-2590
Fax: 806-374-1207
Email: tgreen@
valleyproteins.com
Region: Central

Valley Proteins Inc. -

Baltimore Division 1515 Open Street Baltimore, MD 21226 Contact: Robert Hutson Phone: 540-877-2590 Fax: 410-355-3095 Email: rhutson@ valleyproteins.com Region: Eastern Valley Proteins Inc. -

Fayetteville Division 1309 Industrial Drive Fayetteville, NC 28301 Contact: Jason Wright Phone: 540-877-2590 Fax: 910-213-1140 Email: jwright@ valleyproteins.com Region: Eastern

Valley Proteins Inc. -

Gastonia Division 5533 S. York Road Gastonia, NC 28052 Contact: Matthew Beadle Phone: 540-877-2590 Fax: 704-861-9252 Email: mbeadle@ valleyproteins.com Region: Eastern

Valley Proteins Inc. -

Knoxville Division 9300 Johnson Road Strawberry Plains, TN 37871 Contact: Bobby Watson Phone: 540-877-2590 Fax: 865-932-5713 Email: rwatson@ valleyproteins.com Region: Eastern

Valley Proteins Inc. -

Lewiston Division P.O. Box 10 Lewiston, NC 27849 Contact: Mike Anderson Phone: 540-877-2590 Fax: 252-348-2389 Email: manderson@ valleyproteins.com Region: Eastern

Valley Proteins Inc. -

Linkwood Division 5420 Linkwood Road Linkwood, MD 21835 Contact: Reed Parks Phone: 540-877-2590 Fax: 410-228-9389 Email: rparks@ valleyproteins.com Region: Eastern

Valley Proteins Inc. -

Linville Division 6230 Kratzer Road Linville, VA 22834 Contact: Hobie Halterman Phone: 540-833-2007 Fax: 540-833-6504 Email: hhalterman@ valleyproteins.com Region: Eastern

Valley Proteins Inc. -

Oklahoma Division 2228 S. Santa Fe Avenue Okalahoma City, OK 73109 Contact: Shayne Bartlett Phone: 540-877-2590 Fax: 405-235-9960 Email: sbartlett@ valleyproteins.com Region: Central Valley Proteins Inc. -

Rose Hill Division
P.O. Box 1026
469 Yellow Cut Road
Rose Hill, NC 28458
Contact: Steve Lester
Phone: 540-877-2590
Fax: 910-289-3312
Email: slester@
valleyproteins.com
Region: Eastern

Valley Proteins Inc. -

Terre Hill Division 693 Wide Hollow Road East Earl, PA 17519 Contact: John Hamzik Phone: 540-877-2590 Fax: 717-445-6379 Email: jhamzik@ valleyproteins.com Region: Eastern

Valley Proteins Inc. -

Veribest Division 8394 FM 380 San Angelo, TX 76905 Contact: Ronnie Meine Phone: 540-877-2590 Fax: 325-659-3823 Email: rmeine@ valleyproteins.com Region: Central

Valley Proteins Inc. -

Wadesboro Division P.O. Box 718 Wadesboro, NC 28170 Contact: Chris Bivans Phone: 540-877-2590 Fax: 704-694-6145 Email: cbivans@ valleyproteins.com Region: Eastern

Valley Proteins Inc. -

Ward Division 271 Val-Pro Road Ward, SC 29166-9801 Contact: Shannon Owen Phone: 540-877-2590 Fax: 803-685-2591 Email: sowen@ valleyproteins.com Region: Eastern

Valley Proteins Inc. -

Winchester Division P.O. Box 3588 Winchester, VA 22604 Contact: Robert Golightly Phone: 540-877-2590 Fax: 540-877-3136 Email: rgolightly@ valleyproteins.com Region: Eastern

West Coast Reduction Ltd. - Headquarters

1292 Venables Street Vancouver, BC, V6A 4B4 Canada www.wcrl.com Contact: Gordon Diamond or Barry Glotman

Phone: 604-255-9301 Fax: 604-255-3434 Email: info@wcrl.com

West Coast Reduction Ltd.

Vancouver Plant Operations 105 Commercial Drive North Vancouver, BC, V5L 4V7

Canada

Contact: Doug Davidson Phone: 604-255-9301 Fax: 604-255-1803 Email: info@wcrl.com

Products: EX,FM,PB,SF,TG,BM, ST,FGAF,BLF,HI,RF,YG,PF,BFP, CWG,PM,Fish meal,Porcine meal

Region: Western

West Coast Reduction

Ltd. - Calgary 7030 Ogďen Dale Place SE Calgary, AB, T2C 2A3 Canada www.wcrl.com Contact: Geoff Smolkin Phone: 403-279-4441 Fax: 403-279-6928 Email: info@wcrl.com

Products: EX,FM,SF,TG,MB,HI, DT,BM,ST,FGAF,BLF,RF,YG,Fish meal

Region: Western

West Coast Reduction

Ltd. - Edmonton 1930 121 Avenue NE Edmonton, AB, T6S 1B1 Canada www.wcrl.com Contact: James Taylor Phone: 780-472-6750 Fax: 780-472-6944 Email: info@wcrl.com Products: EX,FM,PB,SF,TG,DT, BM,ST,FGAF,BLF,RF,YG,Fish meal,Porcine meal Region: Western

Minnesota

West Coast Reduction

Ltd. - Saskatoon 3018 Miners Avenue Saskatoon, SK, S7K 4Z8 Canada www.wcrl.com Contact: Geoff Smolkin/Dale Steinbach Phone: 306-934-4887 Fax: 306-934-3364 Email: info@wcrl.com Products: EX,FM,PB,SF,TG,MB, DT,BM,ST,FGAF,BLF,HI,RF,YG, Fish meal Region: Western

Western Mass. Rendering Co. Inc.

94 Foster Road Southwick, MA 01077 www.westernmassrendering.com Contact: David T. Plakias Phone: 413-569-6265 Fax: 413-569-6512 Email: david@wmrco.com Products: EX,SF,FGAF,DT,TG

Region: Eastern

Active Members by State/Canada

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Pilgrim's Pride Corp 2	4
Wisconsin	
JBS Packerland Green Bay 2-	4
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2019 Associate and Allied Members

Brokers of fats and proteins, equipment manufacturers, and firms serving the rendering industry

Air/Water Treatment

Chem-Aqua Inc.

NCH Corporation 2727 Chemsearch Boulevard Irving, TX 75062 www.chemaqua.com Contact: Jay Wilkison Phone: 478-731-0184 Email: jay.wilkison@nch.com Contact: Eric Behn Phone: 973-896-4587 Email: eric.behm@ chemaqua.com Products: Water treatment Region: Central, Western

ChemE Solutions Inc.

816 E. Lakeshore Drive Lake Stevens, WA 98258 www.chemesolutions.com Contact: Geoff Stensland Phone: 206-817-6667 Email: geoff@ chemesolutions.com Region: Western

Chemtron Corporation

3500 Harry S. Truman
Boulevard
St. Charles, MO 63301
www.chemtroncorporation.com
Contact: Joe Schott
Phone: 800-940-5445
Fax: 636-940-0773
Email: orders@
chemtron.h2o.com
Region: Central

Clean Water Technology Inc.

151 W. 135th Street Los Angeles, CA 90061 www.cleanwatertech.com Contact: Mary Cohodes Phone: 310-380-4648 or 262-424-5364 Email: mcohodes@ cleanwatertechnology.com Region: Western

FRC - A JWC Environmental Brand

P.O. Box 3147 Cumming, GA 30028 www.jwce.com Contact: Leah Surber Phone: 770-534-3681 Fax: 770-783-8632 Email: leahd@jwce.com Products: Dissolved air flotation equipment, screens Region: Eastern

Kusters Water

Kusters Zima Corporation P.O. Box 6128 Spartanburg, SC 29304 www.kusterszima.com Contact: Bill Guarini Phone: 864-576-0660 Fax: 864-587-5761 Email: bill.guarini@ kusterszima.com Region: Eastern

LANXESS Corporation

111 RIDC Park West Drive Pittsburgh, PA 15275 www.lanxess.com Contact: Jeannie McClaning Phone: 412-310-1831 Email: jeannie.mcclaning@ lanxess.com Region: Eastern

Oxidizers Inc.

Baghouse Services Inc. 1731 Pomona Road Corona, CA 92880 www.oxidizers.net Contact: Tony King Phone: 951-271-3990 Fax: 951-271-3991 Email: info@oxidizers. net Region: Western

SCP Control Inc.

7791 Elm Street NE
P.O. Box 32022
Minneapolis, MN 55432
Contact: Eric Peterson
Phone: 763-572-8042
Fax: 763-572-8066
Email: info@scpcontrol.com
Region: Central

Steen Research LLC

19363 Willamette Drive, Suite 235 West Linn, OR 97068 Contact: Steve Temple Phone: 408-828-8177 or 503-722-9088 Fax: 503-722-1336 Email: stemple@ steenresearch.com Region: Western

VanAire Inc.

840 Clark Drive Gladstone, MI 49837 www.vanaireinc.com/daf Contact: Mandy Iverson Phone: 906-428-2731 Fax: 906-428-9061 Email: aiverson@ vanaireinc.com Products: Wastewater treatment, DAF equipment Region: Eastern

Antioxidants

Ameri-Pac Inc.

Wilbur-Ellis Nutrition P.O. Box 1088 745 S. 4th Street St. Joseph, MO 64502 www.ameri-pac.com Contact: Jeff Burnett Phone: 816-233-4530 Fax: 816-233-1702 Email: JBurnett@ ameri-pac.com Region: Central

Caldic USA

2425 Alft Lane Elgin, IL 60124 www.caldic.com Contact: Sandy Boston Phone: 913-302-0132 Email: sboston@caldic.us Region: Central

C.F. Zeiler & Company Inc.

8601 LaSalle Road, Suite 203 Towson, MD 21286 www.cfzeiler.com Contact: Patrick Higgins Phone: 410-828-7182 Fax: 410-828-7183 Email: phiggins@cfzeiler.com Region: Eastern

CFS North America LLC

Camlin Fine Sciences 3179 99th Street Urbandale, IA 50322 www.camlinfs.com Contact: Danny Gauthier Phone: 864-377-4887 Email: danny.gauthier@ camlin.com Region: Central

FoodSafe Technologies

94 East Jefryn Boulevard, Unit H Deer Park, NY 11729 www.foodsafetech.com Phone: 631-392-1526 Fax: 631-392-1529 Email: render@ foodsafetech.com Region: Eastern

Kemin Nutrisurance Inc.

1900 Scott Avenue
Des Moines, IA 50317
www.kemin.com/assurance
Contact: Chris Gloger or
Kevin Custer
Phone: 281-615-7924 (Chris)
or 515-289-6842 (Kevin)
Email:
chris.gloger@kemin.com or
kevin.custer@kemin.com
Region: Central

Novus International Inc.

20 Research Park Drive St. Charles, MO 63304 Contact: Vanessa Stewart Phone: 314-550-1592 Fax: 314-576-6041 Email: vanessa.stewart@ novusint.com Region: Central

Peak Tech Inc.

P.O. Box 7 Jeffersonville, IN 47130 Contact: Jim Sparrow Phone: 812-283-6697 Fax: 812-283-0765 Email: jsparrow@pfauoil.com Region: Central

Videka

A Diana Pet Food & Kalsec Alliance
3713 West Main Street
Kalamazoo, MI 49006
www.diana-group.com
Contact: Kevin Meyle
Phone: 800-323-9320
Fax: 269-382-3060
Email: kmeyle@kalsec.com
Region: Eastern

Vitablend USA

Amtech/Barentz
1200 Hosford Street, Suite 204
Hudson, WI 54016
www.vitablend.nl
Contact: Yohann Hureau
Phone: 715-381-5746
Fax: 715-381-5745
Email: contact@
vitablend-usa.com
Region: Central

VRM Labs

109 Ash Court Easley, SC 29642 www.vrmlab.com Contact: Dr. David Meisinger Phone: 515-975-3557 Email: meisinger@vrmlab.com Products: Specialty chemicals Region: Central

Bulk Liquid Storage / Transportation

Braid Logistics North America Inc.

Braid Logistics UK Inc.
14950 Heathrow Forest
Parkway Suite #500
Houston, TX 77032
www.braidco.com
Contact: Lynn Stacy
Phone: 281-219-4222
Fax: 281-219-4221
Email: Istacy@braidco.com
Region: Central

28 April 2019 Render NRA Membership Directory www.nationalrenderers.org

CST Industries Inc.

345 Harvestore Drive DeKalb, IL 60115 Contact: Tim O'Connell or

Jill Jones

Phone: 405-380-5410 or 913-815-1272 Email: toconnell@ cstindustries.com, or sales@cstindustries.com Region: Central

Dupré Logistics LLC

201 Energy Parkway, Suite 500 Lafayette, LA 70508 www.duprelogistics.com Contact: Alfred Parker Phone: 504-812-8622 Email: aparker@ duprelogistics.com Region: Central

Dura Cast Products Inc.

16160 Hwy 27 Lake Wales, FL 33859 www.duracast.com Contact: Gabe Madlang Phone: 863-638-3200 Fax: 863-638-2443 Email: gmadlang@ duracast.com Region: Eastern

Stoller Trucking Inc.

P.O. Box 309 Gridley, IL 61744 www.stollertrucking.com Contact: Brian S. Stoller Phone: 309-747-4521 Fax: 309-747-4457 Email: bstoller@ stollertrucking.com Region: Central

T-Haul Tank Lines

2561 N Patterson Avenue Springfield, MO 65803 www.thaultanklines.com Contact: Dave Samford Phone: 417-893-3690 Fax: 417-761-6630 Email: dave.samford@ t-haul.com Region: Central

Trans Ocean Bulk Logistics Solutions

10344 New Decade Drive Pasadena, TX 77507 www.transoceanbulk.com Contact: Steen Svendsen Phone: 281-334-6585 x7006 Email: s.svendsen@ transoceanbulk.com Region: Central

Chemicals

Anderson Chemical Co.

325 S. Davis Litchfield, MN 55355 www.accomn.com Contact: Brett Anderson Phone: 320-693-2477 Fax: 320-693-7740 Email: bca@accomn.com Region: Central

BASF Corporation

11501 Steele Creek Road Charlotte, NC 28273 www.basf.com Contact: Dennis Berry Phone: 734-324-6526 Email: dennis.berrv@basf.com Products: Water treatment Region: Eastern

Elkem Silicones

Bluestar Co. 2 Town Center Boulevard New Brunswick, NJ 08816 www.elkem.com Contact: Tom Stremlau Phone: 678-477-3366 Email: tom.stremlau@ elkem.com Region: Central

3540 East 26th Vernon, CA 90058 Contact: Joe Graffius Phone: 800-767-9112 Email: jgraffius@ ccichemical.com Region: Western

Chem-Tech Solutions Inc.

427 Brook Street Belmont, NC 28012 www.chemtechsolutions.com Contact: Tony Phillips Phone: 704-829-9202 Fax: 704-829-9203 Email: info@ chemtechsolutions.com Products: Degreasers/cleaners/ defoamers Region: Eastern

Impact Cleaning/DuBois **Distribution**

N8898 River Road Berlin, WI 54923 www.duboischemicals.com Contact: Dale Jezwinski Phone: 513-504-6036 Fax: 800-543-1720 Email: dale.jezwinski@ gmail.com Products: Degreasers/Cleaners for trucks, equipment, walls and floors, truck wash systems Region: Eastern, Central

Vantage Oleochemicals

4650 South Racine Avenue Chicago, IL 60609-3321 Contact: Jason Bettenhausen Phone: 773-376-9000 Fax: 773-376-1936 Email: jason.bettenhausen@ vantagegrp.com Products: Oleochemicals Region: Central

Commodity Brokers/ Traders

Agri Trading

P.O. Box 609 340 Michigan Street SE Hutchinson, MN 55350 www.agritradingcorp.com Contact: John Gordon Phone: 320-234-4356 Fax: 320-234-4376 Email: john.gordon@ agritradingcorp.com Region: Central

Calpine Energy Solutions

130 Voyage Mall Marina del Rey, CA 90292 www.calpinesolutions.com Contact: Gene Owens Phone: 310-686-5702 Email: gene.owens@ calpinesolutions.com Products: Natural gas and power Region: Western

Decom Inc.

11325 South Hudson Avenue Tulsa, OK 74137 Contact: J.C. Deyoe Phone: 918-298-5205 Email: jcdeyoe@aol.com Products: FM,BP,SF,TG,FGAF, MM,MB,DT,BR Region: Central

E.B. Wakeman Company

408 S Main Street, Suite 220 Templeton, CA 93465 Contact: Gary Gibson Phone: 805-781-8475 Fax: 805-781-0516 Products: FM,PB,MB,TG,BR Region: Western

Fairway Dairy & Ingredients LLC

17725 Juniper Path Lakeville, MN 55044 www.fairwaydairy.com Contact: John Kwasek Phone: 952-431-0416 Fax: 952-431-8470 Email: jkwasek@ fairwaydairy.com Region: Central

Gavilon Ingredients LLC

1331 Capitol Avenue Omaha, NE 68102-1106 www.gavilon.com Contact: Aaron Perkinson Phone: 402-889-4304 Fax: 402-221-0343 Email: aaron.perkinson@ gavilon.com Products: Animal proteins and fats, grain, feed ingredients, energy, and biofuels Region: Central

Gersony Strauss Company Inc.

171 Church Street, Suite 270 Charleston, SC 29401 Contact: Lonnie James Phone: 843-853-7777 Fax: 843-853-6777 Email: gersony@gersony.com Region: Eastern

Interra International

400 Interstate North Parkway Suite 1400 Atlanta, GA 30339 www.interrainternational.com Contact: Reint Huizinga Phone: 678-496-2020 Email: rhuizinga@ interrainternational.com Region: Eastern

Mini Bruno North America Inc.

Mini Bruno Sucesores C.A. 243 Tresser Boulevard, Floor 17 Stamford, CT 06901 www.minibruno.us Contact: Alves Neri Phone: 203-422-2923 Fax: 203-422-0441 Email: aneri@minibruno.com Region: Eastern

Pasternak, Baum & Co. Inc.

500 Mamaroneck Avenue Harrison, NY 10528 www.pasternakbaum.com Contact: Michael Sanchez Phone: 914-630-8080 Fax: 914-630-8120 Email: fatsandoils@pbaum.net Products: Fats, oils, grains Region: Eastern

Perdue Agribusiness LLC

6906 Zion Church Road Salisbury, MD 21804 www.perdueagribusiness.com/ animal-nutrition Contact: Darryl Betts Phone: 410-341-2598 Fax: 410-341-2603 Email: darryl.betts@ perdue.com Products: Poultry and dairy Region: Eastern

Pipeline Foods

1250 E Moore Lake Drive, Suite 200 Fridley, MN 55432 www.pipelinefoods.com Contact: Michael McCartan Phone: 651-329-3710 Email: mmccartan@ pipelinefoods.com Region: Central

POET Nutrition

POET LLC 4506 N. Lewis Avenue Sioux Falls, SD 57104 www.poet.com Contact: Ashley Hummel Phone: 605-965-6232 Email: ashley.hummel@ poet.com Products: Fats and oils Region: Central

Sunbelt Commodities Inc.

P.O. Box 70006 Marietta, GA 30007-0006 Contact: Dave Haselschwerdt Phone: 770-578-8883 Fax: 844-269-8316 Email: dave@ sunbeltcommodities.com Products: BR,TG,ET,FM,PB Region: Central

Third Coast Commodities LLC

332 S. Michiga Avenue Floor 9 Chicago, IL 60607 Contact: Paul Dickerson Phone: 800-869-5124 Fax: 847-589-0820 Email: paul@ thirdcoastcommodities.com Region: Central

Universal Green Commodities

11 Beacon Street, Suite 415 Boston, MA 02108 www.ugcinc.com Contact: Jamie O'Brien Phone: 617-742-1111 Fax: 888-782-5671 Email: j.obrien@ugcinc.com Region: Eastern

Wilbur-Ellis Nutrition LLC

Wilbur-Ellis Company 2001 SE Columbia River Drive, Suite 200 Vancouver, WA 98661 wilburellisnutrition.com Contact: Dori Dumont Phone: 360-816-0747 Fax: 360-892-4097 Email: ddumont@ wilburellis.com Region: Western

W.W.S. Inc.

4032 Shoreline Drive, Suite 2 Spring Park, MN 55384 www.wwstrading.com Contact: Brett Perry Phone: 952-541-9001 or 888-645-6328 Fax: 952-541-9206 Email: brett@wwstrading.com Products: Commodity merchandiser of fats, oils, and proteins Region: Central, Eastern, Western

Consultants

Bolton & Menk Inc.

1519 Baltimore Drive Ames, IA 50010 www.bolton-menk.com Contact: Greg Sindt Phone: 515-233-6100 Fax: 515-233-4430 Email: gregsi@ bolton-menk.com Products: Environmental engineering and permit services, wastewater treatment facility design and studies Region: Central

Energy Management Resources Inc.

6324 N. Chatham, Suite 166 Kansas City, MO 54151 www.emr-energy.com Contact: Ginger Needham Phone: 816-883-1000 Fax: 816-883-1001 Email: gneedham@ emr-energy.com Region: Central

GHD Services Inc.

30 River Park Place West, Suite 220 Fresno, CA 93720 www.ghd.com Contact: Michael Beerends or Jason Haelzle Phone: 559-326-5900 Fax: 559-326-5905 Email: michael.beerends@ ghd.com or jason.haelzle@ghd.com

Reid Engineering Company Inc.

Region: Western

1210 Princess Anne Street Fredericksburg, VA 22401 www.reidengineering.com Contact: Shane H. Reid Phone: 540-371-8500 Fax: 540-371-8576 Email: sreid@ reidengineering.com Products: Wastewater, water, utility, and site development Region: Eastern

Equipment

AC Corporation

P.O. Box 16367 Greensboro, NC 27416-0367 Contact: Trip Walker www.accorporation.com Phone: 336-273-4472 Fax: 336-274-6035 Email: twalker@ accorporation.com Region: Eastern

Alfa Laval Inc.

111 Parker Street
Newburyport, MA 01970
www.alfalaval.com
Contact: Todd Blasé
Phone: 262-716-3417
Email: todd.blase@
alfalaval.com
Region: Eastern

Alloy Hardfacing & Eng. Co. Inc.

20425 Johnson Memorial Dr. (Hwy 169) Jordan, MN 55352 www.alloyhardfacing.com Contact: Paul Rothenberger Phone: 800-328-8408 or 952-492-5569 Fax: 952-492-3100 Email: paulr@ alloyhardfacing.net Region: Central, Western

Anco Rendering Equipment

1420 Lorraine Avenue High Point, NC 27263-2040 www.ancoeaglin.com Contact: Tom Stanforth Phone: 336-855-7800 Fax: 336-855-7831 Email: tom_stanforth@ ancoeaglin.com Region: Eastern

Artex Manufacturing

P.O. Box 88

Redwood Falls, MN 56283 www.artexmfg.com Contact: Mike Anderson Phone: 507-644-2893 Fax: 507-644-7000 Email: manderson@ artexmfg.com Products: Aluminum rendering trailers, air/water treatment Region: Central

BM&M Screening Solutions

5465 Production Boulevard Surrvey, BC, Canada V3S 8P6 www.bmandm.com Contact: Maureen Goosen Phone: 800-663-0323 Fax: 604-539-1022 Email: sales@bmandm.com 16212 Moorland Circle Minnetonka, MN 55345 Contact: Kent Mellen Phone: 612-991-8414 Email: kmellen@bmandm.com Region: Central, Western

Brown Industrial Inc.

311 W. South Street P.O. Box 74 Botkins, OH 45306-0074 www.brownindustrial.com Contact: Craig D. Brown Phone: 937-693-3838 Fax: 937-693-4121 Email: craig@ brownindustrial.com Products: Truck bodies/trailers Region: Central, Eastern, Western

Cablevey Conveyors

Intraco Inc.
P.O. Box 148
Oskaloosa, IA 52577
www.cablevey.com
Contact: Karl Seidel
Phone: 641-673-8451
Fax: 641-673-7419
Email: Karl.Seidel@
cablevey.com
Region: Central

Consolidated Fabricators

14620 Arminta Street Van Nuys, CA 91402 www.con-fab.com Contact: Kerry Holmes Phone: 818-933-0885 Email: kholmes@con-fab.com Products: Waste containers Region: Western

Dupps Company

P.O. Box 189
Germantown, OH 45327
www.dupps.com
Contact: Frank Dupps Jr. or
Richard Weeks
Phone: 937-855-6555
Fax: 937-855-6554
Email: info@dupps.com
Region: Central, Eastern,
Western

Dupps Company - Ankeny

P.O. Box 257
Ankeny, IA 50021
www.dupps.com
Contact: Theodore Clapper
Phone: 515-964-1110
Fax: 515-964-0863
Email: tclapper@ dupps.com
Products: Repair and sales
Region: Central, Western

Dupps Separation Technology / Dupps Gratt Centrifuges

P.O. Box 189
Germantown, OH 45327
www.dupps.com
Contact: Ray Jobe
Phone: 937-855-6555
Fax: 937-855-6554
Email: rjobe@dupps.com
Region: Central, Eastern,
Western

East Manufacturing Corp.

1871 State Route 44
Randolph, OH 44265
www.eastmfg.com
Contact: Chris Cooler
Phone: 330-325-8213
Fax: 330-325-7851
Email: ccoler@eastmfg.com
Products: Trailers

Excel Truck Group

Region: Eastern

3243 Lee Highway
Weyers Cave, VA 24486
www.exceltruckgroup.com
Contact: Greg Witt
Phone: 540-453-1003
Fax: 540-234-0997
Email: gwitt@ExcelTG.com
Region: Eastern

Frontline International Inc.

187 Ascot Parkway Cuyahoga Falls, OH 44223 www.frontlineii.com Contact: John Palazzo Phone: 330-861-1100 Fax: 330-861-1105 Email: jpalazzo@ frontlineii.com Products: Used cooking oil auto-

Products: Used cooking oil auto mated system (equipment only)

Region: Eastern

Genesis III Inc.

P.O. Box 186
5575 Lyndon Road
Prophetstown, IL 61277
www.g3hammers.com
Contact: Jonathan Paul
Phone: 815-537-7900 or
866-376-7900
Fax: 815-537-7905
Email: jonathan.paul@
g3hammers.com
Products: Hammermill hammers
Region: Central

Haarslev Inc.

9700 NW Conant Avenue Kansas City, MO 64153 www.haarslev.com Contact: Troels Svendsen or Patrick O'Haver Phone: 816-799-0808 or 410-320-5000 Email: tsv@haarslev.com or pajo@haarslev.com Region: Central, Western

HF Press + LipidTech

Harburg Freudenberger Maschinenbau Gmbh 103 Western Avenue Akron, OH 44313 www.hf-press-lipidtech.com Contact: Jon Hanft Phone: 330-864-0800 Fax: 330-864-5941 Email: jon.hanft@ us.hf-group.com Region: Eastern

Industrial Hardfacing Inc.

218 E. Main Street Lamoni, IA 50140 www.industrialhardfacing.com Contact: Chip Millslagle Phone: 800-247-7778 Fax: 641-784-6923 Email: sales@industhard.com Products: Equipment, repair, and consulting Region: Central

Industrial Steam

1403 SW 7th Street
Atlantic, IA 50022
www.industrialsteam.com
Contact: Jeremy Zellmer
Phone: 712-243-5300
Email: jzellmer@
industrialsteam.com
Products: Deaerators, firetube
boilers, and high pressure
condensate systems
Region: Central

KWS Manufacturing Co. Ltd.

3041 Conveyor Drive Burleson, TX 76028 www.kwsmfg.com Contact: Jim Colllins Phone: 817-295-2240 Fax: 817-447-8528 Email: mperkins@kwsmfg.com Products: Bulk material handling equipment Region: Central

Leem Filtration

25 Arrow Road Ramsey, NJ 07446 www.leemfiltration.com Contact: Bill Boyd Phone: 813-653-9006 Fax: 813-685-3382 Products: Filtration equipment Region: Eastern

MAC Trailer Mfg.

14599 Commerce Street Alliance, OH 44601 www.mactrailer.com Contact: Joe Dennis Phone: 330-823-9900 Fax: 330-823-0232 Email: jdennis@mactrailer.com Products: Rendering trailers Region: Eastern

Martin Sprocket & Gear

3600 McCart Street
Ft. Worth, TX 76110
www.martinsprocket.com
Contact: Juan Fletes
Phone: 817-258-3000
Fax: 817-258-3173
Email: jfletes@
martinsprocket.com
Products: Bulk material
handling and mechanical
power transmission equipment
Region: Central

MMI Tank and Industrial Services

3240 S. 37th Avenue Phoenix, AZ 85009-9700 www.mmitank.com Contact: Casey Wilstead Phone: 602-272-6000 Fax: 602-272-6700 Email: casey@mmitank.com Products: Fabricate/install tanks and repair/replace equipment Region: Western

MPI - Magnetic Products Inc.

683 Town Center Drive Highland, MI 48356 www.mpimagnet.com Contact: Kyle Rhodes Phone: 248-887-5600 Email: info@mpimagnet.com Products: Equipment design Region: Central

Onkens Inc.

P.O. Box 72 320 E. Main Easton, IL 62633 www.onkens.net Contact: David Hull Phone: 309-562-7271 Fax: 309-562-7272 Email: dhull@onkens.net Products: Truck bodies, trailers, and bulk grease containers Region: Central, Eastern, Western

Orthman Conveying Systems

P.O. Box B Lexington, NE 68850 www.orthman.com Contact: Jimmy Rios Phone: 817-542-8859 Email: jrios@orthman.com Region: Central

Par-Kan Company

2915 W 900 S Silver Lake, IN 46982 www.par-kan.com Contact: Kyle Bruner Phone: 260-352-2141 Fax: 260-352-0701 Email: kbruner@par-kan.com Products: Grease containers/lids Region: Central

Performance Industries

P.O. Box 241262 Little Rock, AR 72223 www.performanceindustriesus.com Contact: Shane Sweetin Phone: 501-455-1300 Fax: 501-455-7722 Email: shanesweetin@ performanceindustriesus.com Products: Replacement parts for hammermills and vibratory shakers Region: Central

Phelps Fan LLC

P.O. Box 190718 Little Rock, AR 72219-0718 www.phelpsfan.com Contact: Harold Specht Phone: 501-568-5550 Fax: 501-568-3363 Email: hspecht@ phelpsfan.com Region: Central

Rendeq Inc.

1813 Frank S. Holt Drive Burlington, NC 27215 www.rendeq.com Contact: Mark DeWeese Phone: 336-226-1100 Fax: 336-270-5357 Email: info@rendeq.com Region: Eastern

Roll Rite LLC

650 Industrial Drive
Gladwin, MI 48624
www.rollrite.com
Contact: Gary Viall
Phone: 423-505-5855
Fax: 989-505-7805
Email: garyv@rollrite.com
Products: Automated tarp
system for trucking industry
Region: Central

RW Manufacturina

P.O. Box 599
Stuttgart, AR 72160
www.rwmfginc.com
Contact: Randy Sweetin or
Kevin Sweetin
Phone: 870-673-7226
Fax: 870-673-6131
Email:
rsweetin@rwmfginc.com
ksweetin@rwmfginc.com
Products: Replacement parts
for hammer mills and shakers
Region: Central

Saeplast Americas Inc.

100 Industrial Drive
Saint John, NB, E2R 1A5
Canada
www.saeplast.com
Contact: Chris French, CSL
Phone: 613-406-7801
Fax: 506-658-0227
Email: chris.french@
saeplast.com
Products: Plastic containers
Region: Central

Scan American Corp.

9505 N. Congress Avenue Kansas City, MO 64153 www.scanamcorp.com Contact: Jeff Drake Phone: 816-880-9321 Fax: 816-880-9343 Email: jdrake@ scanamcorp.com Products: Pumps, cookers, presses, driers, grinders, coagulators, crushers, mixers Region: Central

Sturtevant Inc.

348 Circuit Street
Hanover, MA 02339
www.sturtevantinc.com
Contact: Joe Muscolino
Phone: 781-829-1431
Email: jmuscolino@
sturtevantinc.com
Products: Air classifier/
separator to reduce ash and increase protein in animal protein meals
Region: Eastern

Summit Trailer Sales Inc.

One Summit Plaza Summit Station, PA 17979 www.summittrailer.com Contact: Chuck Pishock Phone: 570-754-3511 Fax: 570-754-7025 Email: chuck@ summittrailer.com Region: Eastern

Superior Process Technologies

Baker Commodities 4020 Bandini Boulevard Vernon, CA 90058-4274 www.superiorprocesstechnologies. com

Contact: Doug Smith Products: Biodiesel production Region: Central

Syntron Material Handling P.O. Box 1370

TUPEIO, MS 38801 www.syntronmh.com Contact: Angie Swain Phone: 662-869-5711 Email: info@syntronmh.com Region: Eastern

Titus Manufacturing LLC

9887 6 B Road
Plymouth, IN 46563
www.titusmfg.com
Contact: Tom Read
Phone: 574-936-3345
Fax: 574-936-3905
Email: tread@titusmfg.com
Products: Titus II grinder
Region: Central, Eastern

Travis Body and Trailer Inc.

13955 FM 529
Houston, TX 77041
www.travistrailers.com
Contact: Stuart Swint
Phone: 713-466-5888 or
800-535-4372
Fax: 713-466-3238
Email: sswint@travistrailers.com
Products: Trailer manufacturer

Region: Central

Uzelac Industries Inc.

6901 Industrial Loop Greendale, WI 53129 www.uzelacind.com Contact: Michael Uzelac Phone: 414-529-0240 Fax: 414-529-0362 Email: mike@uzelacind.com Products: Duske drying systems Region: Central

Walinga USA Inc.

1190 Electric Avenue Wayland, MI 49348 www.walinga.com Contact: Terry Medemblik Phone: 800-466-1197 Fax: 616-877-3474 Email: tjm@walinga.com Products: Collection vehicles Region: Eastern

Equipment - Centrifuges

Cen-Tex Centrifuge LLC

500 Frazier Commerce Drive Conroe, TX 77303 https://cen-tex.net/
Contact: Tiffany Thumann Phone: 936-344-2052 Fax: 936-344-2152 Email: tthumann@cen-tex.net Products: Parts, repairs, and new manufacture centrifuges Region: Central

Centrifuge Chicago Corporation

1721 Summer Street
Hammond, IN 46320
www.centrifugechicago.com
Contact: Doug Rivich
Phone: 219-852-5200
Fax: 219-852-5204
Email: doug@
centrifugechicago.com
Products: Repair, parts, service
Region: Central

Centrisys Corporation

9586 58th Place
Kenosha, WI 53144
www.centrisys.com
Contact: Jerod Swanson
Phone: 262-654-6006
Email: info@centrisys.com
Products: Dewatering and
thickening centrifuges,
replacement parts, aftermarket
service
Region: Western

CentriTEK - Industrial Centrifuge Specialists

Chris Gatewood Industries Inc. 3195 Park Road, Suite H Benicia, CA 94510 www.centritek.com Contact: Chris Gatewood Phone: 209-304-2200 Email: chris@centritek.com Products: Sales, service, repair of all brands of horizontal decanter centrifuges Region: Western

Elgin Separation Solutions

Elgin Equipment Group 10050 Cash Road Stafford, TX 77477 www.elginseparationsolutions. com

Contact: Raymond Pietramale Phone: 281-261-5778 Fax: 281-499-4080 Email: ray.pietramale@ elginindustries.com Region: Central

Flottweg Separation Technology Inc.

10700 Toebben Drive Independence, KY 41051 www.flottweg.com Contact: Darren Smith Phone: 937-564-7900 Fax: 859-448-2333 Email: dsmith@flottweg.net Region: Eastern

GEA Westfalia Separator

100 Fairway Court Northvale, NJ 07647 www.wsus.com Contact: Rawn Walley Phone: 201-767-3900 Fax: 201-767-3416 Email: info.wsus@ geagroup.com Region: Eastern

GreySun Equipment Company

3102 Avenue M Ext Conroe, TX 77301 www.greysuncentrifugerental. com Contact: Cody Brock Phone: 936-524-5162 Fax: 936-494-3897 Email: cbrock@ centrifugeco.com Region: Central

GTech

27341 Spectrum Way Oakridge, TX 77385 www.gtechus.com Contact: Dennis Edwards Phone: 832-616-2922 Fax: 936-494-0012 Email: dennis.edwards@ gtechus.com Region: Central

Jenkins Centrifuge Company LLC

1123 Swiff Street
North Kansas City, MO 64116
www.jenkinscentrifuge.com
Contact: Kevin Jenkins or
Cam Kirkpatrick
Phone: 800-635-1431
Fax: 816-471-6692
Email: kjenkins@
jenkinscentrifuge.com or
ckirkpatrick@jenkinscentrifuge.com
Products: Rebuild centrifuges, buy
and sell equipment, manufacture
horizontal centrifuges
Region: Central, Eastern,
Western

Separators Inc.

5707 W. Minnesota Street Indianapolis, IN 46241 www.separatorsinc.com Contact: Quenton Lind Phone: 317-484-3745 Fax: 317-484-3755 Email: qlind@sepinc.com Region: Central, Eastern

Equipment - Repair

Brown's Milling Supply Inc.

P.O. Box 500 Alma, NE 68920 www.brownssupply.com Contact: Mike Stemple or Dan Brown Phone: 402-721-7899 Fax: 866-313-2256 Email: mike@ brownssupply.com or dan@ brownssupply.com Region: Central

MDH Boiler Service & Repair Inc.

12106 S. Center Street South Gate, CA 90280 Contact: Mauro Donate Phone: 562-630-2875 Fax: 562-630-2595 Email: mdonate@ mdhboiler.com Region: Western

Motion Industries Inc.

Genuine Parts Company 1605 Alton Road Birmingham, AL 35210 www.motionindustries.com Contact: Keith Sandlin Phone: 256-366-0912 Email: keith.sandlin@ motionindustries.com Products: Industrial distributor providing maintenance, repair, and operational components for rendering facilities Region: Western

Exporters

Fornazor International Inc.

455 Hillsdale Avenue Hillsdale, NJ 07642 www.fornazor.com Contact: John Fornazor Phone: 201-664-4000 Fax: 201-664-3222 Email: john@fornazor.com Products: Animal proteins, concentrates Region: Eastern

International Feed

2500 Shadywood Road, Suite 300 Excelsior, MN 55331 www.internationalfeed.com Contact: Derek Michalski Phone: 952-249-9818 Email: dmichalski@ internationalfeed.com Products: Supplier/Exporter/ Marketer of animal protein meals and co-products Region: Central

K-Pro U.S. LP

475 Regency Park Drive, Suite 175 O'Fallon, IL 62269 www.k-pro.us Contact: Erin Rochman Phone: 314-425-8550 Email: erin@k-pro.us Region: Central

KimShe International Grain and Feed LLC

475 County Road 520, Suite 104 Marlboro, NJ 07746 www.kimshellc.com Contact: Sherif Gendi Phone: 732-444-1136 Email: sgendi@kimshellc.com Region: Eastern

Scoular

250 S Marquette Avenue, Suite 1050 Minneapolis, MN 55401 www.scoular.com Contact: Michael McCartan Phone: 612-335-8205 Fax: 612-335-8770 Email: mmccartan@ scoular.com Region: Central

Feed Manufacturers/ Ingredients

3D Corporate Solutions

601 N. 13th Street Monett, MO 65708 www.3Dsolutions.com Contact: Jessica Kutz Phone: 417-236-9602 Fax: 417-236-0039 Email: įkutz@3dsolutions.com Region: Central

Fairview Mills LLC

PO Box 170 Seneca, KS 66538 www.jsixenterprises.com Contact: Micheal G. Bulk Phone: 785-336-2148 Fax: 785-336-6720 Email: mikeb@ fairviewmills.com Products: Pet food Region: Central

Feed Energy Company

4400 E. University Ave Pleasant Hill, IA 50327 www.feedenergy.com Contact: Joe Green Phone: 800-451-9413 Fax: 515-265-4163 Email: sales@feedenergy.com Products: BLF,FA,FGAF,RF,SF Region: Central

International Nutrition

P.O. Box 27540 Omaha, NE 68127 www.ini-agworld.com Contact: Steve Silver Phone: 402-331-0123 Fax: 402-331-0169 Email: info@ini-agworld.com Region: Central

Jones-Hamilton Co.

30354 Tracy Road Walbridge, OH 43465 www.jones-hamilton.com Contact: Bernard D. Murphy Phone: 419-666-9838 Email: bmurphy@ jones-hamilton.com Products: Feed-grade sodium bisulfate Region: Eastern

Mid-South Milling Company

710 Öakleaf Office Lane Memphis, TN 38117 www.msmilling.com Contact: Nathan Pappas Phone: 901-681-4301 Fax: 901-681-4337 Email: npappas@ msmilling.com Region: Eastern, Central

Midwestern Pet Foods Inc.

9634 Hedden Road Evansville, IN 47725 www.earthbornholisticpetfood.com Contact: Bruce Blackford Phone: 812-867-4504 Email: bblackford@ midwesternpetfoods.com Region: Central

NF Protein LLC

1919 Grand AVenue Sioux City, IA 51106 www.nfprotein.com Contact: Eric J. Lohry Phone: 712-279-1938 Fax: 712-279-1973 Products: Animal protein producer Region: Central

Nutrify LLC

The Wenger Group 101 West harrisburg Avenue Rheems, PA 17570 www.nutrify.com Phone: 717-361-4295 Email: dkeefe@nutrify.com

Region: Eastern

Premier Ag Resources Ltd.

747 Hyde Park Road, Suite 205 London, ON, Canada N6H 3S3 www.parltd.ca Contact: Paul Primeau Phone: 519-657-1177 Email: pprimeau@parltd.ca Region: Eastern

Skretting Canada

1370 East Kent Avenue Vancouver, BC, Canada V5X 2Y2 www.skretting.ca Contact: Rick Reynolds Phone: 604-325-0302 Email: rick.reynolds@ skretting.com Region: Western

The Peterson Company

6312 W. Main Kalamazoo, MI 49009 www.thepetersoncompany.com Contact: Leigh Ann Sayen Phone: 269-350-2900 Email: leighanns@ thepetersoncompany.com Region: Eastern

Tri Star LLC

300 South 55th Street, Suite B Kansas City, KS 66106 Contact: Jennifer Perkins Phone: 913-573-2130 Fax: 913-573-2140 Email: jennifer@tristarkc.com Region: Central

Wellens & Co. Inc.

6700 France Avenue South Suite 106 Minneapolis, MN 55435 www.wellenscompany.com Contact: Matthew Wellens Phone: 952-925-4600 Fax: 952-922-1555 Email: wellens.company@ gmail.com Region: Central

Financial/ Professional Services

Williams Mullen

1441 Main Street, Suite 1250 Columbia, SC 29201 www.williamsmullen.com Contact: Ethan Ware Phone: 803-567-4610 Email: eware@williamsmullen.com Products: Law firm Region: Eastern

Laboratory/Testing

Bureau Veritas

12622 Highway 3 Webster, TX 77598 www.bureauveritas.com Contact: Carly Borel Phone: 713-451-2121 Email: carly.borel@ inspectorate.com Region: Central

Diversified Laboratories Inc.

4150 Lafayette Center Drive, Suite 600 Chantilly, VA 20151 www.diversifiedlaboratories.com Contact: Peter Kendrick Phone: 703-222-8700 Fax: 703-222-0786 Email: pkendrick@ diversifiedlaboratories.com Region: Eastern

FOSS North America

8091 Wallace Road Eden Prairie, MN 55344 www.foss.us Contact: Tim Welby Phone: 800-547-6275 Fax: 952-974-9823 Email: twelby@fossna.com Region: Central

FSNS - Food Safety Net Services

199 W Rhapsody
San Antonio, TX 78216
www.fsns.com
Contact: Faustine Curry
Phone: 888-525-9788
Fax: 210-525-1702
Email: faustine.curry@fsns.com
Products: Laboratory/Testing
Region: Central

Thionville Laboratories Inc.

Thionville Surveying Co. Inc. 5440 Pepsi Street
New Orleans, LA 70123
Contact: Paul Thionville
Phone: 504-733-9603
Fax: 504-733-6457
Email: operations@
thionvillenola.com
Region: Central

Samplers and Surveyors

Cullen Maritime Services Inc.

465 46th Street Richmond, CA 94805-2301 Contact: John Spenik Phone: 510-232-6700 Fax: 510-232-6766 Email: cmssfo@pacbell.net 2126 E. 7th Street Long Beach, CA 90804 Contact: John Spenik Phone: 562-433-4355 Fax: 562-433-3457 Email: john.spenik@ cullenmaritime.com 9317 232nd Street SW Edmonds, WA 98020-5026 Contact: Craig Burgess Phone: 206-783-6979 Fax: 206-783-6913 Region: Western

Trade Groups

American Feed Industry Association

2101 Wilson Boulevard, Suite 810 Arlington, VA 22201 www.afia.org Contact: Joel G. Newman Phone: 703-524-0810 Fax: 703-524-1921 Email: jnewman@afia.org Region: Eastern

Pet Food Institute

2025 M Street NW, Suite 800 Washington, DC 20036 www.petfoodinstitute.org Phone: 202-367-1120 Fax: 202-367-2120 Region: Eastern

Poultry Protein and Fat Council

1530 Cooledge Road Tucker, GA 30084 www.poultryrenderers.com Contact: Rafael Rivera Phone: 678-514-1978 Fax: 770-493-9257 Email: rrivera@uspoultry.org Region: Eastern

Western United Dairymen

1315 K Street
Modesto, 95354
www.westernuniteddairymen.com
Contact: Paul Sousa
Phone: 209-527-6453
Email: PaulS@
westernuniteddairymen.com
Products: California dairy milk
producer/trade organization
Region: Western

Other

Anitox Inc.

1055 Progress Circle Lawrenceville, GA 30043 Contact: Jesse Unsicker Phone: 309-648-1199 Email: junsicker@anitox.com Products: Pathogen control, milling efficiency Region: Eastern

Arreff Terminals Inc.

Fornazor International Inc. 3600 Elm Avenue Portsmith, VA 23704 Contact: Gloria Lambert Phone: 757-393-6534 Fax: 757-393-2976 Products: Bulk transloading/ bagging Region: Eastern

Caito Fisheries Inc.

P.O. Box 2415

San Francisco, CA 94126 Contact: Jeanette Caito Phone: 415-441-2121 Fax: 415-441-2221 Email: caitosf@mcn.org Products: Seafood processor Region: Western

Chemol Company Inc.

P.O. Box 16286 Greensboro, NC 27416 www.chemol.com Contact: Fred Wellons Phone: 336-333-3050 Email: fred@chemol.com Products: Bio-based and biorenewable chemicals Region: Eastern

Countryside Hides Inc.

Boston Hides and Furs 10261 Twin Angela Lane Alma Center, WI 54611 Contact: Sidney Erickson Phone: 715-964-5021 Fax: 715-964-5023 Email: cowboycountryside@ gmail.com Products: Dead stock removal, pet food, hides Region: Central

Fatty-Chem By-Products Inc.

P.O. Box 209
Los Fresnos, TX 78566
www.fatty-chem.com
Contact: Andres Perez or
Dolores Ortega
Phone: 956-832-3421 or
956-233-5691
Fax: 956-233-4760
Email: andres@fatty-chem.com
or dortega@fatty-chem.com
Products: Waste oil collection
Region: Western

Jacob Stern & Sons Inc.

2104 75th Street Houston, TX 77011 Contact: Jay Van Valen Phone: 713-926-8386 Fax: 713-926-8128 Email: įvanvalen@ tx.jacobstern.com Products: Tallow Region: Central

NSF International

789 Dixboro Road Ann Arbor, MI 48105 www.nsf.org Contact: Elaine Vanier Phone: 757-319-2820 Email: evanier@nsf.org Products: Audits and certification, consulting, training, laboratory services Region: Eastern

Olymel S.E.C.

2200 Avenue Pratte
Bureau 400
St-Hyacinthe, QB, J2S 4B6
Canada
www.olymel.ca
Contact: Claude Chapdelaine
Phone: 450-771-0400
Fax: 450-771-4872
Email: ClaudeChapdelaine@
olymel.com
Products: Meat processor
Region: Eastern

Renewable Energy Group

416 S. Bell Avenue P.O. Box 888 Ames, IA 50010 www.regfuel.com Phone: 515-239-8117 Products: Biodiesel production, feedstock procurement, marketing Region: Central

Southwest Hide Co.

9207 W. Blackeagle Drive Boise, ID 83709 www.southwesthide.com Contact: John Rueb Phone: 208-378-8000 Fax: 208-377-9069 Email: jr@southwesthide.com Products: DL,EX,HI Region: Central, Western

Sustainable Sourcing LLC

19633 LaGrange Road Mokena, IL 60448 www.sustainablesourcingllc.com Contact: Jodi McCarthy Phone: 815-714-8055 Fax: 812-645-1830 Email: jodi.mccarthy@ sustainablesourcingllc.com Products: Sustenance (food) for probiotic (animal) processes Region: Central

Sustainable Swine Solutions

Johnsonville N6998 Johnsonville Way Sheboygan Falls, WI 53085 www.ssr-solutions.com Contact: Lauren Sammal Phone: 920-453-7584 Email: Isammal@ ssr-solutions.com Region: Central

The Jacobsen

3980 N. Broadway 103/PMB #148 Boulder, CO 80304 www.thejacobsen.com Contact: Ryan Standard Phone: 773-322-5174 Email: ryan@ thejacobsen.com Region: Central

The Shortening Shuttle

Worcester Industrial Products
7 Brookfield Street
Worcester, MA 01605
www.shortening-shuttle.com
Contact: Martha Hawley
Phone: 800-533-5711
Fax: 508-831-9990
Email: mhawley@shortening-shuttle.com
Products: Grease transport
Region: Eastern

Universal Maintenance Inc.

P.O. Box 104
Murrayville, GA 30564
www.universalmaintenance.com
Contact: Jessica Colbert
Phone: 706-297-0087
Fax: 706-297-0088
Email: jessica@bellsouth.net
Products: General contractor
Region: Eastern

Val-U-Meat Pkg

2107 So. Milliken
Ontario, CA 91761
Contact: Steve Stiles
Phone: 909-390-9828
Fax: 909-390-9833
Email: stevestiles@
dslextreme.com
Products: Dead stock removal
- dairy
Region: Western

Validus

A division of Where Food
Comes From Inc.
10538 Justin Drive
Urbandale, IA 50322
www.validusservices.com
Contact: Brian Bennett
Phone: 571-830-6603
Fax: 703-563-6027
Email: bennettb@
validusservices.com
Products: Professional services
Region: Central

Wells Fargo Food and Agribusiness

1100 Abernathy Road, Suite 1130 Atlanta, GA 30328 www.wellsfargo.com Contact: Bob Vail Phone: 404-433-2936 Email: bob.vail@ wellsfargo.com Region: Eastern

Associate Members by Alphabetical Full listing is available on indicated page number.

3D Corporate Solutions	33	Decom Inc.	29	Kemin Nutrisurance Inc	28	Scan American Corp	31
AC Corporation		Diversified Laboratories				Scoular	
				KimShe International			
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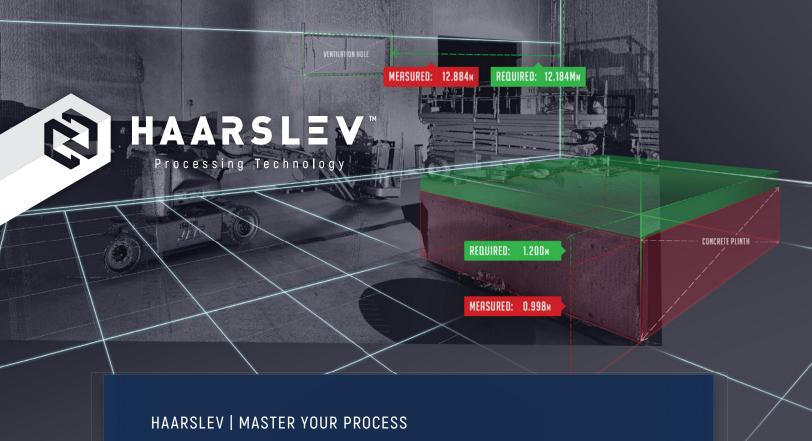
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California Renderers

Must Engage

By Tina Caparella

ast year, California renderers were forced to play defense against the organics recycling industries wanting to collect renderer's raw materials to use in anaerobic digestion and composting. So far this year, the matter has quieted down thanks to efforts by the California Department of Food and Agriculture (CDFA) toward engaging

with the California Department of Resources Recycling and Recovery, or CalRecycle. Pacific Coast Renderers Association (PCRA) members discussed this and other issues at their annual convention held in March in Carmel Valley, California, including voting in Ken Kage, Darling Ingredients, as PCRA president, and T.J. Koewler, also of Darling, as vice president for the next two years.

Years ago, data on raw material collected by California renderers was gathered and shared with legislators to show rendering's impact on the state. PCRA members agreed it was time to again collect and share the information as well as reach out to the state's meat industry for support.

Paula Batarsch, CDFA Meat, Poultry, and Egg Safety (MPES) Branch chief, said rendering is still invisible to the livestock, feed, and agriculture state regulatory agencies outside her branch. In an effort to educate others on state law that requires meat by-products be sent to rendering to ensure the safety of California's livestock, Batarsch's team has created a food waste guide titled "Segregating and Recycling Commercial Organic Materials from Retail Stores, Butcher Shops, and other Licensed Food Establishments" that is posted on the MPES website at www.cdfa.ca.gov/ahfss/MPES. The guide is important as local jurisdictions begin putting programs in place to meet Senate Bill 1383 that orders the reduction of organic waste going to state landfills.

CDFA's inedible kitchen grease (IKG) program has a new supervisor, two dedicated rendering inspectors, and four meat inspectors who occasionally assist on the program. Currently, the department is investigating 54 cases of IKG theft in the state and is working with the California Restaurant Association to educate restaurants on state law that requires IKG collectors to be registered and licensed.

"It's a big state so we are building partnerships with other agencies, both federal and state, and local law enforcement groups," Batarsch commented. Another issue CDFA is working on is the use of barbiturates for euthanizing animals, particularly horses, which are then sent to rendering. The Food and Drug Administration (FDA) has a zero tolerance for pentobarbital in feed, meaning renderers are not able to accept animals euthanized by this drug. CDFA is working with equine groups on alternative methods and has approached

FDA to develop safe levels for barbiturates. This process is not simple and will take time.

PCRA lobbyist Dennis Albiani, California Advocates, addressed the state's challenging political arena. "California is now a one party state and that's just the way it is," he noted. Albiani credited the California Grain and Feed Association, Darling Ingredients, Imperial Western Products, and other companies for engaging early on with Governor Gavin Newsom and his leaders to build relationships. Newsom has shown he is involved with the state's departments and their activities, unlike his predecessor Jerry Brown.

On the California legislative front, a big win for renderers last fall was the passing of Assembly Bill 3036 that "prohibits a county, city, district, or local government agency from subjecting the hauling of certain byproducts from the processing of food and beverages to an exclusive franchise, contract, license, or permit." This year, 2,500 bills have been introduced in the state legislature, about 500 more than average, with 85 bills focused on composting and anaerobic digestion.

"A lot is going on in Sacramento," Albiani stated. "This is a very aggressive and progressive legislature." He told renderers to engage with counties, cities, retailers, recyclers, food processors, livestock groups, and farm bureaus. "You need to belong to farm bureaus in the counties you operate in as these are our partners and renderers need friends in California," Albiani concluded.

Ross Hamilton, Darling Ingredients, shared the value of rendering to its stakeholders and the planet:

- renderers process and repurpose 100 percent of the used cooking oil and raw materials collected
- rendering prevents pathogens from entering the food chain
- rendering is used is hundreds of products for the home (i.e., capsules and pill coatings, pet food, and matchsticks), the outdoors (i.e., fertilizer, gelatin, and paint), and all around the globe (i.e., tires, biofuels, and antiseptics)

"We catch a lot of flak for our by-products, especially in pet food, but in other parts of the world, our by-products are consumed as food," Hamilton pointed out. "Only in the United States do we not consume these healthy by-products." He went on to say the value of animal by-products was once understood and talked about, especially in the meat industry. The book *Pig 05049* by Christien Meindertsma in the Netherlands describes 185 products made from one pig, but Hamilton said this type of writing isn't seen any more.

"Rendering contributes to the sustainability of animal production, the meat industry, restaurants, and other industries that are not so obvious," he continued. "We have to do a better job of communicating this."

Ridley Bestwick, West Coast Reduction and chairman of the National Renderers Association (NRA), presented the Canadian landscape as it relates to the country's rendering industry, which processes about three million metric tons of animal by-products per year from the slaughter of 21 million hogs, 3.2 million beef cattle, 730 million poultry, and 1.3 million metric tons of fish. On the industry's radar for this year is Canada's new Clean Fuel Standard (CFS) released in December 2018, a modernization of the country's feed regulations, a new regulatory approach for *Salmonella* in livestock feeds, and the reopening of the Indonesian market for ruminant meat and bone meal, which is trading at a low \$125 a ton in Canada.

To meet the new CFS, animal fats and used cooking oil feedstock requirements for biofuels are projected at 1.85 million metric tons per year by 2030. Currently only about 50,000 metric tons of used cooking oil is recycled in just Western Canada. Bestwick reported that West Coast Reduction has a new customer, British Petroleum, who used

K are president, and

New PCRA officers are, from left, Ken Kage, president, and T.J. Koewler, vice president, both of Darling Ingredients.

70,000 metric tons of tallow in 2018 to produce "coprocessed" renewable diesel and is expected to use 140,000 metric tons of tallow in 2019 for its renewable fuel. Yellow grease and used cooking oil are now being proven as a feedstock in coprocessed renewable diesel.

Bestwick shared how West Coast Reduction is working hard at becoming visible about its role in a sustainable food system. A new video titled "Nothing Left Behind" has been created showing the benefits of its process and finished products, and a slew of infographics have been developed to

tell its story at schools, farmers markets, and other general public events.

Stephen Silva, E.B. Wakeman, reiterated how used cooking oil has become a premium product due to renewable fuels, yet there are some challenges ahead. He sees the vegetarian diet trend in feed continuing, but not on the West Coast where cattle are still being fed rendered fats. Silva does not see domestic demand for meat and bone meal improving and believes Mexico's growing feed industry, especially in pet food, will be an opportunity if the current trade agreement gets approved.

Dr. David Meeker, NRA Scientific Services, updated PCRA members on Food Safety Modernization Act inspections for this year, which are more intense than in 2018 and focus on food safety plans, required records, hazard analysis, preventive controls (i.e., cooker validations), and pentobarbital. Meeker stated that one fact needing emphasizing is that cooking and drying works for destroying *Salmonella* and research has proven this.

NRA President Nancy Foster told attendees that the association is refreshing its strategic plan for the next five years to address upcoming trends, opportunities, and challenges. Issues such as a progressive Democrats' Green New Deal in Washington, DC, and millennials' activity on social media are crucial areas the rendering industry needs to focus its attention. New markets will also need to be discovered as existing markets may not always be there.

The PCRA convention wrapped up with California Senator Ben Allen, who chairs the state's Senate Environmental Quality Committee, declaring that politicians need to be a jack-of-all-trades to deal with the complexities of government. He proclaimed rendering as an advanced form of recycling with one of the biggest industry challenges being that people do not know about rendering, especially in state government, among legislators, and at local levels.

"You play an important, but unrecognizable, part of the system," Allen said. "Don't neglect political strategies. If you're not at the table, you're on the menu."

PCRA's next convention is scheduled for March 6–7, 2020, in Carmel Valley, California.



Don't be on the Menu, Come to the Table!

With the new United States (US) Congress now in full swing after the partial government shutdown at the beginning of the year, the House and Senate are moving forward on their political agendas. The National Renderers Association (NRA) strongly supports several bills important to rendering.

The Republican-controlled Senate and Democrat-led House are each promoting their party's vision by introducing new bills and holding investigative hearings to lay groundwork for next year's presidential and congressional elections. The question this year is whether both chambers can compromise sufficiently to pass joint legislation and send it to President Donald Trump's desk for him to sign into law. This may be difficult, however, since elections are about standing out from one's opponents and not moving toward the middle to compromise, especially during primary election season. It will also be extremely difficult for both houses of Congress to override any legislative veto by Trump.

This June, NRA's 2019 Washington, DC, Fly-In is being held at an outstanding time for renderers to make their voices heard on Capitol Hill. The rendering industry have significant issues before Congress this year, such as passing biodiesel tax credits, the United States-Mexico-Canada Agreement (USMCA), and strong US Department of Agriculture (USDA) funding to promote exports of rendered products while the United States endures this trade war environment. Improved trucking, roads, and bridges are also important if Congress acts on infrastructure legislation. The outcome of each issue will affect future business opportunities and operations for renderers.

All renderers are invited to this year's Washington, DC, Fly-In, held June 24–26. NRA renderer members are encouraged to attend and tell their compelling story of sustainability and importance in agriculture—and beyond—to their members of Congress. By speaking together in support of rendering, the industry will be stronger and more successful.

While cool weather is not promised at this year's fly-in, thought-provoking and enjoyable discussions with fellow renderers from across the industry can be expected. The meeting opens with an industry issues briefing from senior Washington, DC, decision makers, followed by a legislative update dinner that night. The second day begins with a congressional update breakfast with the remainder of the fly-in reserved for meetings with individual representatives and senators. Registration information will be sent out soon.

NRA's Legislative Action Committee Chairman David Kaluzny II knows Capitol Hill well, having served as leader of the committee for a number of years. He is renowned for saying—and it is true—"If you're not at the table, you're on the menu." That is why it is so important for renderers to come to the Washington, DC, Fly-In and visit their members of Congress to speak up. Representatives and senators are genuinely interested in what renderers do and the difference the industry makes. This advocacy also strengthens NRA's work

for renderers on Capitol Hill. By coming to Washington, DC, and talking with members of Congress, those legislators have the opportunity to personally understand and appreciate that they have constituents in rendering.

No experience is needed to come to NRA's Washington, DC, Fly-In. Attendees will be fully prepared to talk with representatives and senators after NRA briefings on rendering's important issues both before and during the meeting. NRA staff can also accompany renderers at Capitol Hill meetings if preferred.

In Congress this year, watch for possible tax reform, a vote to approve the USMCA, and legislation to improve the nation's infrastructure. Immigration will get much attention, linked to the proposed wall on America's southern border with Mexico; however, unless one side or the other makes significant concessions, no bill is likely to pass.

The Democratic-controlled House will also stake out new progressive environmental bills, such as the recently-introduced Green New Deal resolution. Investigations into Trump are also being pursued, including possible dealings by the Trump campaign with Russia during the presidential elections and other information that could weaken the White House and the Republican Party going into the next elections.

From here on, every congressional move, every bill, every statement, and every event can be seen as positioning for the 2020 elections. On Tuesday, November 3, 2020, US voters will choose the next president and vote for all 435 members of the House and about one-third of the US Senate as 34 Senate seats are up for reelection. The Republican Party will have to defend more Senate seats than Democrats—22 Republican senate seats will be contested, while Democrats will need to protect only 12 seats.

NRA is well represented on Capitol Hill and among Washington, DC, federal agencies by The Russell Group, the association's new political consulting firm. This author is working with them to advocate for rendering. Steve Kopperud, NRA's longstanding political advisor, retired from consulting at the end of December after years of dedicated work on behalf of the US rendering industry. This author had the opportunity to work with Kopperud for the last five years and was continually impressed by his enthusiasm, steel-trap mind (he never forgot a name or event), humor, and commitment to rendering.

The Russell Group is a highly-regarded leading agricultural lobbying firm in the Washington, DC, area. Its four principals—two Republicans and two Democrats—work both sides of the political aisle with a deep understanding of agricultural issues and long-standing relationships with decision makers. Rendering issues are not partisan, so the ability to advocate effectively with Democrats and Republicans alike is important.

"Trusted Advocacy Built with Integrity" is The Russell Group's brand, evident at first look on their website at http://

russellgroupdc.com. Randy Russell, the firm's leader, has developed broad experience in agriculture policy across his career. He served as chief of staff to Secretary of Agriculture Jack Block, deputy assistant secretary for economics at USDA, agriculture assistant for Senator Rudy Boschwitz (R-MN), vice president for agriculture and trade policy at the National Council of Farmer Cooperatives, director of government relations for The Pillsbury Company, and the 1981 farm bill coordinator for USDA.

Be sure to mark June 24-26 on your calendar to participate in NRA's Washington, DC, Fly-In this year. It can be difficult to step away from work, but the benefits are important. Without a doubt, last year's fly-in helped drive NRA's win in the 2018 farm bill, which garnered many benefits for the rendering industry. Positive results on this year's challenges will help strengthen the industry for the future.

If you have questions about NRA's legislative advocacy and this year's Washington, DC, Fly-In, please contact the author at NancyFoster@ nationalrenderers.com.

Rendering Leader Passes

Lawrence "Larry" Joseph Langenhorst passed away on Friday March 8, 2019, at the age of 87. After graduating high school and serving in the Navy, Langenhorst became involved in the family rendering business and physically built the Berlin Rendering plant, from the ground up, in Berlin, Wisconsin. He continued managing the operation for his entire career, until ownership transitioned to Nick Beucher and Sons of Chicago, Illinois. Langenhorst later became a district manager for National By-Products and, along with his brothers, also expanded the original operation to include Circle 5 Farms, Circle 5 Feeds, and the Berlin



Landfill. Langenhorst was also an active member and contributor to the National Renderers Association, where he held all the officer positions of Area V and served as a member of the board of directors for many years. He was very active in his church and the community.

Langenhorst is survived by his wife, Laura; sons Michael (Marlene), Jeffrey (Janice), and Brian (Jodi); stepson Mark (Sally) Sanders; and many, many other family and friends. Memorial donations may be made to St. John's Lutheran Church in Berlin, Wisconsin.

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Biofuels Ramping Up Despite No Federal Tax Credit

In late February, United States (US) Senators Chuck Grassley (D-IA) and Ron Wyden (D-OR) introduced the Tax Extender and Disaster Relief Act of 2019, which included a retroactive reinstatement of the \$1 per gallon biodiesel and renewable diesel tax credit from January 1, 2018, through December 31, 2019. One week later, the California Advanced Biofuels Alliance (CABA) sent House Speaker Nancy Pelosi (D-CA) and Minority Leader Kevin McCarthy (R-CA) a letter urging the US House of Representatives to renew the biodiesel tax credit as soon as possible. This has been the longest period of policy uncertainty since the tax incentive was first established nearly 15 years ago. The lack of a tax credit has created a slowing of both investments in new plants and in raising funds to maintain, improve, or expand existing plants, according to CABA.

Despite this, Shell Trading (US) Company has agreed to purchase renewable diesel from Next Renewable Fuels' proposed 600-million-gallon-per-year project in Port Westward on the Columbia River in northern Oregon. Representing an investment of more than \$1 billion, Next Renewable Fuels is scheduled to open its facility in 2021 and plans to supply Shell and other partners with its alternative liquid fuels to help meet customer demand while complying with federal and state carbon regulations and fuel security requirements.

Meanwhile, Phillips 66 announced it would partner with Renewable Energy Group (REG) to build a large-scale renewable diesel plant next to its existing oil refinery in Ferndale, Washington. Phillips also recently revealed it would partner with California-based Ryze Renewables to build two renewable diesel plants in Nevada.

The Iowa Economic Development Authority (IEDA) Board awarded tax benefits to ReadiFuels-lowa, a newly created entity started by Applied Research Associates Inc. (ARA) and C&N Biofuels LLC. The company will utilize a variety of feedstocks to produce approximately 34 million gallons of renewable diesel and renewable naphtha annually, the nation's first commercial facility to use a biofuels process developed by ARA and Chevron Lummus Global. ReadiFuels-lowa plans to build a new production facility utilizing existing infrastructure at a partially abandoned 77-acre property near Hull in rural Sioux County, Iowa. Construction is expected to begin in the fourth guarter of this year and will be finished in November 2020. IEDA awarded tax benefits from the High Quality Jobs program for the \$58.7 million capital investment. The project is expected to create 31 jobs. Other funding sources include a \$45.1 million guaranteed loan from the US Department of Agriculture, according to state documents.

Legislative Activities

In Washington State, the House passed a Clean Fuels Standard (H.B. 1110) that would institute a low carbon fuel program by 2020. The program is designed to reduce greenhouse gas emissions from transportation fuels 10 percent

below 2017 levels by 2028 and 20 percent below those same levels by 2035. Supporters share that the program will play a significant role in meeting the state's overall greenhouse gas emissions reduction goals and help support fledgling biofuel producers in the state.

In Washington, DC, Bloomberg reports that a Securities Exchange Commission filing by CVR Energy shows the company saved \$189 million in renewable identification number (RIN) compliance costs in 2018 following extensive lobbying to get the Renewable Fuels Standard changed to reduce RIN costs for small refiners. RIN prices have tumbled in the aftermath of lower RIN demand as smaller refiners received waivers from the Environmental Protection Agency (EPA).

Optimism at California Biofuels Conference

At the California Advanced Biofuels Conference held late February in Sacramento, California, this author, as vice chair of CABA, gave the annual state of the alliance address to a packed house of the industry's major players. Past chairs Jennifer Case, New Leaf Biofuels, and Curtis Wright, Imperial Western Products, were awarded the alliance's Climate Leader Award for their dedication to the industry.

Floyd Vergara, California Air Resources Board (CARB), gave an update on the state's Low Carbon Fuel Standard, assuring attendees that California recognizes the need for biofuels. He touched on a number of different upcoming CARB projects, including a workshop to discuss the alternative diesel fuel regulation, a targeted white paper to be released in the first half of the year for the low-emission diesel regulation, and the upcoming new technology diesel engine testing at the University of California, Riverside.

National Biodiesel Board (NBB) Chief Executive Officer Donnell Rehagen was optimistic in his presentation, stating that he believes the expired biodiesel tax credit will be reinstated and extended. He is also hopeful that US House leadership will take the signal from the US Senate in getting tax legislation passed soon, and stressed the importance of efforts from the industry to educate Congress members and assist NBB in its lobbying efforts.

CABA lobbyist Louie Brown of Partner, Kahn, Soares, and Conway LLP, moderated a roundtable legislative panel with various staffers from California's capitol: Derek Chernow, California State Legislature chief of staff; Senator Bob Wieckowski; Katie Valenzuela, capitol director for Assembly member Eduardo Garcia; and Katerina Robinson, legislative director for Senator Nancy Skinner. This panel is a new addition to the conference and provided insight into California politics. The panelists described their offices' bills supporting biofuels and emphasized the importance of educating staffers on the issues the biofuels industry faces.

Eric Bowen, Renewable Energy Group, moderated a panel focusing on displacing the state's petroleum diesel pool. One month prior to the conference, CABA released a report mapping out the alliance's plan to eliminate petroleum diesel in California by 2030 that aligns with Governor Gavin Newsom's goals (see Newsline on page 8). The panel included representatives from alternative fuel producers who demonstrated the ability to accomplish this objective. The conference wrapped up with a look into the future on innovative original equipment manufacturer technologies and feedstock supply.

New EPA Chief Gets Mixed Reviews

In late February, the US Senate confirmed EPA Acting Administrator Andrew Wheeler, a former coal lobbyist, to lead the nation's top environmental regulator. A Washington insider with years of experience working as a congressional staffer, Wheeler was nominated by President Donald Trump in January to replace Scott Pruitt, who resigned in July 2018 amid widespread criticism for alleged ethical missteps. Only one Republican in the Republican-controlled Senate opposed Wheeler, Maine's Susan Collins, who argued his efforts to roll back standards on emissions blamed for climate change takes the country in the wrong direction.

Business interests like oil and coal, eager to see reduced regulation, were quick to hail Wheeler's confirmation,

while Democrats and conservation groups are worried that environmental rollbacks under the Trump administration are going too far.

While running the EPA on an interim basis, Wheeler oversaw the weakening of President Barack Obama-era rules limiting carbon and mercury emissions from power plants and standards on carbon dioxide emissions from cars and trucks. He has also advanced an initiative to lift a summertime ban on higher ethanol blends of gasoline that was enacted to curb smog. During his confirmation hearing in January, Wheeler said he did not believe climate change was a major crisis, a stance that resonates with Trump's skepticism but which clashes with the scientific consensus that global warming will have devastating consequences if not addressed urgently.

Like Pruitt, Wheeler held nearly 20 times more meetings with industry representatives than with conservationists during his first two months on the job, according to a copy of his schedule reviewed by Reuters. Prior to the vote, Wheeler had also faced a brief pushback from five Republican senators from oil states, including Ted Cruz of Texas, over what was perceived as his support of policies favorable to the ethanol industry. The corn and oil industries have conflicting interests when it comes to biofuels like ethanol, which compete with petroleum for market share. All five senators had met with Wheeler in February over the issue and voted to approve him. Michelle Bloodworth, president of the American Coalition for Clean Coal Electricity, a coal industry lobbying group, said Wheeler was a "thoughtful leader who understands the need for sensible environmental policies."



Threats Continue to Meat and its By-products

In late February, the Livestock Environmental Assessment and Performance (LEAP) Partnership Steering Committee met in Rome, Italy. LEAP is a multi-stakeholder initiative of the Food and Agriculture Organization (FAO) Animal Production and Health Division and a group of agriculture and food business representatives launched in October 2010 to benchmark and monitor the environmental performance of the livestock sector. At this first meeting of a new three-year project, representatives of different countries and industries sat around the table along with FAO representatives Camillo de Camillis, LEAP manager, and Henning Steinfeld, LEAP vice chair.

As this new project is a follow-up to previous LEAP programs, a road map was agreed upon:

- road testing of LEAP rules
- development (in 2019), revision, and dissemination (in 2020 and 2021) of LEAP guidelines
- defining a budget and fundraising strategy

A report from small stakeholders in Chaco Salteno, Argentina, showed the successful application of LEAP rules. Another point of the agenda was a report from the EAT-Lancet Commission on Food, Planet, Health that claims healthy food from sustainable food systems can only be achieved by increasing healthy food (i.e., vegetable, fruits, nuts) and decreasing unhealthy food (i.e., red meat, refined grains, and sugar). Frank Mitloehner from the University of California, Davis, commented on the report at the meeting via telephone. He specifically questioned two assumptions in the report:

- If animals are not raised, the agricultural land can be used to produce enough food.
- Eating meat, especially red meat, is bad for health.

Mitloehner pointed out that not all agricultural land can be used to produce food, such as pastures, meadows, pampas, green land, or mountains. In these areas, animals can feed on grass and produce food. Another well-known untruth is the easy-to-promote simplified message that meat is bad for diets. This statement does not take into account that not eating meat and animal products like milk and eggs can cause health deficiencies. A changed view on these key points might alter the picture dramatically, Mitloehner said.

At the next World Renderers Organization (WRO) meeting in La Baule, France, on June 13, 2019, members must decide whether WRO should join LEAP and at what contribution level. The discussion on revising LEAP guidelines could possibly be a threat to the entire livestock chain if allocation rules are changed.

Argentina Renderers Congress

The 3rd National Congress on Animal-Derived Proteins, Tallow, and Fats was held in Mar del Plata, Argentina, at the end of February, with attendees from Argentina, Brazil, Colombia, Mexico, Paraguay, Uruguay, and the United States, among others. Organized by the Camara de Subproductos Ganaderos of Argentina, the congress, titled "Recycling of



From left, Charbel Syrio (ABRA), Vicente Materia (Argentina), Jaime Sasson (Argentina), Baltazar Soarez de Castro Jr. (ABRA), Fernando Mendizabal (Mexico), Decio Coutinho (ABRA), Lucas Cypriano (ABRA), Jorge Rossoti (Argentina), and Daniel de Di Pardo (Argentina) represent the new Latin American association board.

Animal By-products as a Sustainable Model," featured speakers with different approaches to the topic. While all presentations were informative, three were of particular interest.

The first one, "Rescuing Animal Fats for Human Consumption" given by Eduardo Duvinski from the Argentinian association for oils and fats ASAGA (Asociación Argentina de Grasas y Aceites), featured a compilation of the nutritional pyramids throughout the last 50 years. It revealed how consumption recommendations have changed from eating animal fats as a regular nutritional source up to the point of avoiding their consumption, which occurred from the 1970s until 2010. One graph showed the amount of cardiovascular incidences in the global population increasing through this same time period, confirming that by consuming animal fats, the global population experienced few cardiovascular occurrences. Also revealing was the beef tallow, lard, and duck fat products currently available to buy on e-markets as premium and healthy products. Duvinski confirmed that evidence shows the human body requires animal fats to regulate bioactivity and in the production of hormones.

A second presentation of interest, "Biogenic Amines Synthesis in Raw Materials and Effects on Finished Protein Meals" given by Lucas Cypriano of the Brazilian renderers association ABRA, (Associacao Brasileira de Reciclagem Animal), was technical, but also provided simple examples that demonstrated it is necessary to separate myths from realities when rendered products are stigmatized as "bad" because they contain high levels of biogenic amides. Cypriano provided arguments to demystify those attacks, one being that several vegetable proteins have larger amounts of biogenic amides compared to the amount present in rendered animal proteins. Contact Cypriano at cycon.br@gmail.com or the Brazilian renderers association at www.abra.ind.br for this informative presentation.

The third presentation was on the WRO and sustainability of the global rendering industry given by WRO President Fernando Mendizabal. He shared the work WRO is doing to develop carbon footprint guidelines for measuring rendering's environmental impact; the concept of sustainability, its origins, and the industry; the science of the bio-economy and the concept of circular economy; the assessment of the rendering industry as part of a new digital and connected world with the Fourth Industrial Revolution; and the Global Food Safety Initiative and how it is changing the environment where animal by-products are recycled.

All congress presentations will be made available to the public. This was another exercise of strengthening the rendering industry by maintaining the frontier of knowledge and promoting new developments to ensure the industry will remain viable in this evolving world.

Latin American Association Board Formed

During the Argentinian congress, a new board of rendering associations was founded under the acronym CLIRSA (Consejo Latinoamericano de Reciclaje de Subproductos Animales), or the Latin American board of animal by-products recycling. Argentina, Brazil, and Mexico have joined together and encourage other Latin American countries to become part of this effort. For more information, visit www.clirsa.org. R









Renderers are doing Great—Now Change!

The future of rendering will depend on the industry adapting to ever-changing environmental, social, health, and sustainability challenges. The Fats and Proteins Research Foundation (FPRF) is helping renderers recognize and respond to change.

The global pet food market was worth \$98.3 billion in 2018, growing at an annual rate of 5.3 percent during 2011 to 2018, and is expected to reach \$128.4 billion by 2024, according to ResearchAndMarkets.com. Dog and cat food retail sales in the United States increased more than 4 percent from 2017 to sales of \$27 billion in 2018, reports market research firm Packaged Facts. Pet food derived from animal proteins and fats is the leading segment, with dry pet food being the most popular product type. The pet food industry is now the largest user of rendered fats and proteins so it is clear this segment has grown in importance to renderers while pet food has changed greatly. The quality, safety, and aesthetic needs of pet food manufacturers could easily influence other important markets, such as livestock feed. Renderers would do well to pay attention to the changes in this sector and prepare to adapt.

The rendering industry does a great job of efficiently transferring massive quantities of perishable organic materials and processing them into safe feed ingredients. What if these commodities could become a variety of premium pet food and livestock feed ingredients, specialty items, and valuable industrial materials in ways not currently used? Even if a company decides to not cater to the increasingly demanding pet food market, feed for food-producing animals may not be far behind with regard to some of the trends. Rendering has the opportunity to continue as the key to sustainability for animal agriculture, pet food, and animal food if the challenges can be met efficiently. The Food and Drug Administration now refers to feed as "food for animals," which may be a signal for future expectations. FPRF is dedicated to help meet these challenges.

Some of the recent developments and trends in the pet food world include:

- Online marketing (e-commerce) of pet food, including Amazon and Chewy, are growing in popularity. Could PetSmart stores disappear like Blockbuster and Toys-R-Us? How about vet clinics or supermarkets?
- Fresh pet meal kits can now be delivered directly to homes.
- Pet food premiumization is evolving to include ethical and sustainability claims, while online marketing is making premium foods more accessible.
- Society is becoming concerned with the sustainability impact of products they buy as well as where food comes from and its labeling and nutrient content.
- "Mindful" pet owners are searching for clean labels and ingredient transparency.
- Consumers are buying into the mental and physical health benefits pet ownership personally brings to

- them. Pets are now considered family members and brands are catering to that strong trend.
- "Humanization" of pets extends to pet food purchased or prepared.
- Recognition that pet obesity is not healthy puts more focus on nutrition.
- While home and car ownership by millennials and urbanites decreases, they increasingly own pets.
- Many people now believe their single pet needs a companion, so they have multiple pets.
- Meat analogs produced in laboratories without animals could impact pet food, but it is counter to natural production methods and minimally processed.
- Novel protein alternatives from beans, fungi, and bacteria, or from insects such as black soldier fly larvae, crickets, and mealworms, are increasingly being examined and/or used in pet food.
- Pet food premiums now focus on high protein, varieties of single proteins, proteins as the first ingredient, multiple proteins, exotic proteins, Wagyu beef, and cage-free chicken trends.
- Some pet foods are focused on ancestral, wild, whole prey, wolf, and limited ingredient formulations.
- DNA testing is being used for dogs and cats to fine-tune diets to special needs and to avoid food allergens.
- "Food-omics," such as a microbiome assessment in the gut and in fecal matter, is being introduced to assess metabolism and advise a particular diet.
- Organ meats, skin, and bones are becoming more recognized as nutrient-rich necessities in pet diets.
- Choices beyond extruded kibble are arriving on the market, including entrees, filets, purees, soups, and broths.
- Process options, such as cold-pressed, air-dried, freeze-dried, oven baked, frozen, or minimally processed, are now being utilized.
- Some people are determined that raw food diets are better for pets, which challenges food safety preventive controls.
- There is growing demand for organic and/or natural ingredients that are raised without the use of pesticides, synthetic fertilizers, hormones, or antibiotics, and are socially, ethically, and environmentally produced.
- "Free-from" claims are emerging, including no byproducts, genetically modified organisms, grain, carbohydrates, gluten, highly-processed meat derivatives, or unpronounceable ingredients.
- Healthy claims that some call transparent in fact mean nothing to the health of pets.
- Functional foods that provide health benefits or disease prevention are trending for people and their

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- pets. Are we cooking the function out of proteins and other nutrients?
- Nutraceutical ingredients are increasingly being used in pet foods, such as probiotics, omega fatty acids, glucosamine, pumpkin, kale, chia, sweet potato, kelp, broccoli, carrots, apples, and local raw honey.
- Pet food customization (micro-targeting) is focusing on diets for stage of life, size, breed, activity level, and condition (multiplying the niches).
- Some stores allow pet owners to watch their pet's food being made on-site using human-grade ingredients.
- Internet bloggers are providing great influence on purchasing decisions, with nearly all having an antiby-products message. Few are veterinarians or pet nutrition specialists.
- Social media is a game-changer as consumers receive advice and opinions that are usually not sciencebased. There must be a better way to get facts and science to consumers.
- "Upcycled" ingredients are becoming more recognized as helping the economy, society, and the environment.

These developments and trends will impact the pet food industry and the type of ingredients used in pet food, with some also impacting food for other animals. While consumers often make product decisions based on innuendo, rumor, or opinions from uninformed but influential bloggers, companies must be completely credible, dependable, and consistent without flaws if renderers want to sell ingredients to the pet food market. It is not necessarily a fair situation.

Conversations between feed ingredient sellers and buyers are critical to long-term relationships. Renderers need to shift from providing the "same old" commodities. Even enhanced by the Rendering Code of Practice and implementation of the Food Safety Modernization Act (FSMA), current offerings may not ensure these products will be prominently used in the future. Ingredient suppliers must discuss needs and challenges with customers to reach shared goals. Participants in the newly developed FPRF Pet Food Alliance have begun making important connections, having conversations, designing research, and planning changes to meet the needs of the pet food industry. This is an opportunity every renderer and pet food supplier should be involved in (see side box).

Beyond Pet Food

True sustainability means there is no such thing as waste. All raw materials arriving at a rendering plant should have a use, a market, and a customer. It is a matter of staging, sorting, processing, and marketing in such a way that everyone receives what is intended. Nothing should be hidden, disguised, or blended because no one will notice, or because that is the way it has always been done.

Research is needed to help detect and avoid contaminants, or direct them to places where no harm is done, and to develop new markets for those commodities that existing customers no longer demand or tolerate in order to get what they want. FPRF's research program at Clemson University is working to develop non-feed uses for rendered products that will be necessary to find a profitable home for all materials that end up in a rendering plant.

Research is a Key to Success

A quick internet search yields a long list of keys to success: research, knowledge, preparation, failure, education, self-love, preparation, perseverance, luck, energy, stamina, sensitivity, conflict toleration, resilience, management, passion, accountability, integrity, flexibility, focus, drive, creativity, communication, leadership, preparation, hard work, and confidence. FPRF members are excited about research and encourage others to join them so research is the leading key to success.

The future of rendering is bright and many renderers are well on their way to responding to change. Through research, communication, and assistance from FPRF and the National Renderers Association, the rendering industry will be able to transform itself from the old image of recyclers of all things unmentionable in the animal world into a new image of transparent ingredient suppliers who carefully sort, process, and purvey quality and sustainable products, each to their appropriate markets. This may translate to new lines of production, new lines of business, different forms of processing, more customer focus, and more transparency. It may even mean a change in the name of what renderers do and its organizations. Renderers may also do much more in the future than just rendering, which will need to be backed by knowledge from research. Renderers working together through FPRF impacts the entire industry, in addition to research conducted privately, and will provide the edge renderers need to be in the game.

Pet Food Alliance Meeting

Coordinated by Colorado State University, the FPRF Pet Food Alliance was formed to facilitate the



necessary conversations to address change and meet the pet food industry's needs with research. The alliance has four areas of focus: (1) oxidation and product quality, (2) Salmonella control and food safety, (3) sustainability, and (4) consumer perceptions of pet food and rendered ingredients. Participants include renderers, pet food manufacturers, allied suppliers, and researchers. The group grows with each meeting and has had three productive meetings since its inception in 2017. In June 2019, the alliance will host a technical symposium featuring the latest science on these topics and discussions of needed research. Symposium registration fees are used to fund research the alliance has identified as important to rendering and pet food. This is a great place to be heard and seen by suppliers and customers as both industries prepare for the future. The seminar will be held in Fort Collins, Colorado, immediately following the American Meat Science Association's Reciprocal Meat Conference, the annual meeting of meat scientists, being held June 24–26, which will include scientific sessions on rendering. Pet Food Alliance activities are planned for the afternoon of June 26–27. Registration details are available at www.fprfalliance.agsci.colostate.edu. R

Hold Your Horses! Commission Reins in OSHA

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Since codifying the Multi-Employer Worksite Doctrine 20 years ago, the Occupational Safety and Health Administration (OSHA) has routinely cited multiple employers at the same worksite for the same violations. The doctrine has allowed OSHA to extend liability to general contractors, host employers, staffing agencies, and anyone else who can be conceivably related to an employee accident or alleged safety hazard. In Secretary of Labor v. Suncor Energy (U.S.A.) Inc., Occupational Safety and Health Review Commission (OSHRC) Docket No. 13-0900, the OSHRC issued a significant decision reining in OSHA's "scattershot approach" to cite all employers at a worksite. The commission held that OSHA had misused the doctrine as a form of strict lability against "controlling employers" who had performed their high-level duties with regard to safety. Moving forward, OSHA will be required to hold the controlling employer liable only based on "objectively reasonable" evidence that the employer failed to meet its more limited duty of care. Further, this decision will help guide employers in how to avoid multi-employer worksite and controlling employer liability going forward, and provide some solace that a rigorous safety program and efforts to promote employee safety will not be in vain and used improperly against an employer by OSHA.

Multi-Employer Worksite Doctrine

With its Multi-Employer Citation Policy in 1999, federal OSHA codified its Multi-Employer Worksite Doctrine that allows the agency to cite several employers for alleged violation at the same worksite. Multi-employer worksites exist where there are a number of employers at the same worksite. Each employer has OSHA duties to not only its own employees but also other employer's employees at the site depending on whether the employer is one of the following:

- an employer who creates a hazard for other employees
- an employer who exposes the other employee to a hazard
- an employer who is responsible to correct a hazard to which the other employees may be exposed
- an employer who has control over a worksite or a particular hazard, typically the owner of the worksite,

a general contractor, or a subcontractor with a subsubcontractor

Many employers are totally unaware of these liabilities and fail to take appropriate action(s) to protect other employees who may be at the worksite, including:

- independent contractor employees
- temporary staffing employees
- subcontractors

Multi-employer worksites exist in construction and in general industry.

Employers and industry advocates have criticized OSHA for employing this policy in an unfair manner that is unproductive in terms of employee safety. OSHA compliance officers will routinely enter a worksite for an inspection and cite all the present employers, regardless of their role in employee safety. Not all employers have the same duty of care and inspection at the worksite and the law permits employers to delegate safety responsibilities along with work to third-party contractors. Further, employers often delegate certain safety training, supervision, and enforcement responsibilities. If OSHA cites a host employer merely because an accident occurred on its worksite, it may cite an employer who has never seen the injured employee and who met all of its duties required by law.

This method of enforcement instead creates a type of "strict liability" for accidents, where any employer with a conceivable role in the worksite will be cited. It is part of the "shoot first, ask questions later" approach that many OSHA compliance officers appear to employ instead of conducting a reasonable and appropriate investigation and which the review commission criticized. Moreover, this approach is contrary to the critical element of a federal OSHA citation that requires employer knowledge of the alleged violation: an employer needs to know or should have known of a violative condition to be cited by OSHA. Finally, this overbroad approach leaves employers unable to reasonably determine their compliance responsibilities under the act. Employers may be deterred from involving themselves at the worksite, conducting inspections, or maintaining a rigorous safety program for fear of being labeled by inference as an employer of any individual who sets foot on a worksite.

Employers across industries are faced with difficult questions, including:

- What documentation by way of contracts or other agreements is acceptable to OSHA to delineate the relative responsibilities of employers at a multiemployer worksite for safety compliance?
- Should a general contractor be required to train a subcontractor's employees on specific areas of the subcontractor's specialization?
- Can the general contractor rely on its specialized subcontractors to conduct and document employee training?

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- Can a host employer use a staffing company to train and supervise staffing company employees?
- Will host employers be liable for OSHA violations that occur which only the staffing company management is aware of?
- Which employer is required to inspect the worksite?
- Can the host employer rely on inspections performed by a designated competent employee of its subcontractor?

The commission's decision in *Secretary of Labor v. Suncor Energy (U.S.A.) Inc.* helps to answer employers' questions.

Facts of Suncor Case

Suncor operated a massive refinery complex covering 230 acres and three separate plants. In fall 2012, Suncor completed several capital improvement projects, one of which involved replacing the tubes in a heater (a permit-required confined space). The work on this heater was performed by several third-party specialty contractors, including a company called Mistras.

To perform work inside the heater, Suncor required each contractor first to obtain a "safe work permit" from Suncor's operations division. The contractor had to initiate and generate the permit on Suncor's computerized system. The permit was then electronically transferred to Suncor's operations division, where Suncor's turnaround coordinator and confined space supervisor would review and approve it.

After obtaining the safe work permit from Suncor and before starting work, a crew from Mistras performed a job safety analysis that identified a potential fall hazard from an

elevated surface and stated the need for fall protection and a harness. The two Mistras employees assigned to examine welds in the area entered the area wearing harnesses, but neither employee used a lanyard, yo-yo, or any other fall-restraining device. A third Mistras employee served as primary confined space attendant. Once inside, one Mistras employee inspected welds from an outrigger platform that did not have guardrails. After approximately two to three hours of work, that employee fell off the platform through a gap between scaffolding and the wall of the heater, landing on the ground 25 feet below. The unfortunate accident resulted in severe injuries to the employee.

Citation and Ruling

Section 1926.451(g)(1) of the OSHA standard for construction states in relevant part: "Each employee on a scaffold more than 10 feet (3.1 m) above a lower level shall be protected from falling to that lower level." OSHA issued a citation under this regulation to Suncor, alleging that the "the Company did not ensure that [Mistras's] employees were protected from falling while working on a tubular welded system scaffold." The OSHA secretary asserted that Suncor was liable under the Multi-Employer Worksite Doctrine as a "controlling employer" at the refinery because it had general supervisory authority over its contractors and controlled their access to the interior tube area through its permit system. Accordingly, the judge found that Suncor violated the act by failing to ensure that the Mistras employee wore fall protection equipment. To reach

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that conclusion, the judge reasoned that Suncor failed to exercise reasonable care because it did not make use of various opportunities "to become aware of [the violative condition] and prevent the accident," and therefore "should have known of the violative condition."

Commission's Reversal

Suncor challenged the decision, alleging that the secretary of labor failed to establish that Suncor had constructive knowledge of the violative condition as a controlling employer on a multiemployer worksite. The OSHRC ruled that the judge's approach had been misguided, focusing on whether Suncor knew of the lack of guard rails on the platform rather than whether Mistras

was using fall protection equipment the nature of the regulation. The commission performed an analysis of whether the controlling employer had met its duty to exercise reasonable care, analyzing several factors related to the alleged violative condition itself and those that related to the employer's duty to monitor or inspect.

The commission found no basis to conclude that Suncor should have known of the Mistras employee's failure to use personal fall protection. The commission examined Suncor's duty, given it is a "secondary safety role" as a host employer and in light of objective factors: the nature of the work, the scale of the project, and the safety history and experience of the contractors involved. The judge found that Suncor could rely on Mistras to perform job

safety analysis, determine where fall protection is needed, and require its employees to use the fall protection. The commission merely required Suncor to "exercise reasonable care" as the host employer, which meant that it was not obligated to inspect inside every confined space on its worksite and do an independent analysis before assigning work to contractors.

The commission excoriated the secretary of labor's "scattershot approach" with this citation, citing the host employer where it had a rigorous safety program in place. Further, the commission made clear that the host employer is "not required to inspect the worksite as intensively as an employer whose own employees are exposed." The commission explained that applying the Multi-Employer Worksite Doctrine in this case would "to in effect hold controlling employers strictly liable for the safety shortcomings of their contractors is both unfair and counter-productive." Finally, the commission explained that the citation "should not have been issued in the first place" and that the secretary's choice to litigate "diverted resources away" from employee safety and health.

Takeaways

The commission's message in this case is pointed and important: host employers who maintain a rigorous safety and health program will not be held to the same duty of care and inquiry as their specialty subcontractors. Host employers (and general contractors) will not be required to independently assess and supervise all third-party contractor work. The commission's ruling thereby provides cover for employers to do the things that help improve employee safety. Their use of a safety program and review of third-party work will not make them strictly liable for any violations of that third-party contractor.

Employers should take an active approach to safety and enforce a rigorous program that protects employees. Agreements with subcontractors or independent contractors should be crafted carefully to minimize OSHA and tort liabilities. If OSHA opens an inspection on a multi-employer worksite, employers should promptly contact outside counsel to preserve privileges, defend the inspection, and prevent the issuance of OSHA citations.



Washington Continued from page 7

the Senate will likely act this summer on the expired credits for all of 2018 and 2019 is the fact the bill to extend—or in some cases, make permanent—the tax credits was introduced by Senator Charles Grassley (R-IA), chair of the tax-writing Finance Committee, and his panel's ranking member, Senator Ron Wyden (D-OR). Included in the targeted tax breaks needing extension are the \$1 per gallon blender's tax credit for biodiesel and renewable diesel, as well as a \$1.01 per gallon biofuels producer credit. While the biodiesel industry would prefer to see a producer's tax credit rather than a blender's credit, the attitude at this point is pretty much take-what-you-can-get.

The action got a vote of confidence when both GOP and Democrat members of the House Ways and Means Committee, including ranking member Representative Kevin Brady (R-TX), said good things publicly about enacting a tax extenders package, but Democrats say there will be a cost. First, Ways and Means Committee Democrats want to see the list culled to eliminate credits and other breaks made superfluous by the tax reform law now on the books. Second, House Democrats are contemplating adding other tax code-related actions to an extenders package, including getting the extenders' cost paid for by cutting other related programs along with major changes to the GOP-led tax reform law now on the books and a hallmark of the White House victory list.

In another related biofuels potential development, and one that threatens a legislative battle, is the continued noise from both chambers and both sides of the aisle over the need to repeal/reform/reinvent the Renewable Fuel Standard (RFS). For agriculture, the RFS has always been a two-edged sword: it benefits corn and soybean growers who produce feedstocks for ethanol and biodiesel refining, but is an anathema to livestock and poultry. Fuel makers hate the RFS because they contend it is burdensome, complex, and involves trading on the renewable identification number (RIN) market to track and sometimes offset their RFS blending obligations.

In mid-March, the Environmental Protection Agency (EPA) finally proposed a rule to allow E15 (15 percent ethanol blended with gasoline) to be sold year around, while at the same time imposing reforms on trading of RINs. EPA Administrator Andrew Wheeler announced the promised rulemaking, saying the proposal "was consistent with President Trump's direction" and the plan is to have the E15 rules finalized by summer.

The RIN reforms restrict certain players from buying RINs in the open market, require public disclosure of RIN holdings above stipulated levels, limit how long RINs can be held by a buyer, and increase disclosure requirements to quarterly reporting. Biofuels producers are not thrilled with the reforms and are pushing to have the two subjects tackled separately so as not to delay implementation of the E15 action. Just to make the biofuels arena more interesting and because it can, the National Farmers Union, in praising the E15 action, says it is now time to focus on E30 gasoline.

Another likely brawl this summer/early fall will be congressional ratification of the United States-Mexico-Canada Agreement (USMCA). For the purely partisan Democrats, USMCA represents yet another Trump win that can be tarnished. For other critics, both Republican and Democrat, the treaty falls short on environmental, labor, and enforcement

sections. U.S. Special Trade Representative Robert Lighthizer, knowing the House will be the first chamber to take up ratification, has been crisscrossing the chamber for weeks, having private meetings with key lawmakers, and testifying before committees on the importance of and need to ratify the USMCA. The administration would like to see a House vote by late summer. Lighthizer has made clear that failure to ratify USMCA undercuts all future administration trade expansion efforts, including bilateral agreements with Japan, the European Union, and a possible return of the United States to the TransPacific Partnership, now known as the Comprehensive and Progressive Trans-Pacific Partnership. All these developments are devoutly desired by US agriculture/agribusiness.

While echoing the House Democratic Caucus' concerns, Pelosi has not made her own position known, likely because of the massive value such trade deals represent for her home state. House freshmen Democrats, however, are making Lighthizer's life difficult as they warn Trump's chief trade negotiator to not take their ratification votes for granted. The first-termers have broken from expected bipartisan questions about the new trade deal and demand their concerns over labor and environmental protections, particularly in Mexico, be taken seriously. Lighthizer even did a one-man show for the House Democratic Caucus in March, an event requested by 23 freshmen Democrats, treading lightly as nearly 100 of the people in the room had less than six months experience and were clearly overwhelmed by the massive treaty and its various "side letters," conditions, and exceptions.

Many Republicans and Democrats share a concern over enforcement—some Democrats have called for reopening negotiations on USMCA to strengthen that language—as well as whether the deal is tough enough on any nation that violates its provisions, including one requiring Mexico enact changes to its labor laws. Several freshmen represent ag districts to which USMCA is critical, so messaging is equally important. Meanwhile, the House Progressives Caucus formally announced it opposes the USMCA as negotiated. "We want to make sure we have a bill that works for labor, for the environment, for consumers," the caucus said, which capsulizes the Democrat opposition.

Gearing up for the spring/summer congressional battle over USMCA ratification, the American Farm Bureau Federation (AFBF) and the U.S. Chamber of Commerce formed a massive new coalition—just over 200 groups have joined and more are in the wings—aimed at getting congressional ratification by late summer. Known as the USMCA Coalition, the chamber and AFBF are joined by the National Association of Manufacturers and Chrysler automobiles in managing the largest biz sector group pushing for USMCA ratification. Members include the American Soybean Association, John Deere, and Cargill, which co-chairs the group. The group will not only lobby Congress, but will mount a major public relations effort.

For at least the rest of 2019, Pelosi is calling the shots as far as the congressional agenda is concerned, and if she and her caucus dominate, she will control the headlines as well. It is likely this is her last Congress, depending on who is in the White House after the 2021 inauguration, and she is building a machine that will help ensure it is Trump's last hurrah as well.

Bagwell Awarded for Lifetime Achievement

Tommy Bagwell, former chairman and chief executive officer of American Proteins, was bestowed the Harold E. Ford Lifetime Achievement Award by the U.S. Poultry and Egg Association during the 2019 International Production and Processing Expo in Atlanta, Georgia, in mid-February. This prestigious honor is presented to an individual whose dedication and leadership over the years have far exceeded the ordinary and impacted both the poultry industry and U.S. Poultry and Egg Association in an exemplary manner.



Tommy Bagwell, left, and Tom Hensley, outgoing U.S. Poultry chairman

"The connecting ties and friendship between Tommy, American Proteins, and U.S. Poultry are

long and deep," remarked John Starkey, president of U.S. Poultry. "In fact, it was Tommy's father, Leland, who hired Harold Ford, for whom this award is named. It is a privilege to work with Tommy, and we are honored to present him this award."

A native of North Georgia, Bagwell earned a degree in economics from Clemson University with a minor in Spanish. He also completed graduate studies in industrial management, business administration, and economics at Clemson and the University of Georgia.

In 1969, Bagwell began his professional career at North Georgia Rendering Co., which eventually became American Proteins Inc. Upon the death of his father Leland in 1972, Bagwell became president. American Proteins serves the poultry industry from plants in Georgia, Alabama, and Texas, and supplies feed ingredients throughout the world. The company was sold to Tyson Foods last year.

Bagwell is involved in numerous local organizations and received the Philanthropist of the Year Award from the North Georgia Community Foundation in 2014.

Foster Farms Names CEO, Expands Facility

Dan Huber has been appointed chief executive officer (CEO) of privately-owned Livingston, California-based Foster Farms. Huber has held several leadership positions at the company, most recently serving as chief operations officer. He replaces Laura Flanagan, who resigned to pursue other opportunities after being named to the position in August 2016.

Prior to joining Foster Farms in 1996, Huber held sales and management positions with Oscar Meyer and Kraft Foods. He has participated on several industry



Dan Huber

boards, including the U.S. Poultry and Egg Association, National Chicken Council, and National Turkey Federation. Huber graduated from the University of Colorado-Colorado Springs with a bachelor's degree in finance.

Foster Farms is expanding and upgrading its poultry processing facility in Livingston. The multi-million dollar investment will expand the facility's product lines, which currently provide 2,032 jobs. Additional jobs will be added as part of the expansion. Construction for the project has already begun, with completion expected in September. The expansion has been made possible by a \$6.5 million economic incentive package developed by state and local government leaders. The package includes resources from California Competes, the California Energy Commission Food Production Investment Program, the Merced County Expanded Subsidized Employment Program, the Merced County On-the-Job Training Program, as well as incentives from the City of Livingston.

Haarslev Adds to US Sales Team

Patrick O'Haver and Darren Smith have joined the Haarslev sales team in the United States. O'Haver will service the southeastern region of the country while Smith, who brings expertise in the rendering and fishmeal/oil industries after years with Flottweg Separation, will be responsible for the Northeast and upper midwestern United States. The operations in North America are part of the global Haarslev group that consists of 1,100 employees with manufacturing in Denmark, Brazil, Germany, Poland, China, and the United States.

National Beef to Buy Iowa Premium

National Beef Packing Company LLC has approved a transaction to purchase 100 percent of the ownership interests in Iowa Premium LLC, processors of corn-fed Black Angus beef raised on family farms in Iowa and neighboring upper midwestern states. The transaction is subject to customary conditions and is expected to close in the second quarter of 2019. Located in Tama, Iowa, Iowa Premium employs over 800 people and processes approximately 1,100 head of Black Angus cattle per day.

Wilbur-Ellis Feed Division Renamed

Wilbur-Ellis Feed LLC has introduced its rebranded name, Wilbur-Ellis Nutrition. In addition to the new name, the division also launched a new website that highlights the division's service and solutions-based approach to managing long-standing relationships with customers and partners. The site also provides information on the division's three key focus areas: livestock (specifically beef, dairy, swine, and poultry), aquaculture, and companion animals.

Tyson to Acquire Thai and European Operations

Tyson Foods Inc. has entered a definitive agreement to acquire the Thai and European operations of BRF S.A. The \$340 million purchase includes four processing facilities in Thailand, one processing facility in the Netherlands, and one processing facility in the United Kingdom.

The vertically integrated poultry operations in Thailand include a feed mill, hatchery, breeder farms, and contract

growing operations supplying live birds for the four poultry processing facilities. The four plants produce a wide range of fresh and frozen, valueadded raw, and fully cooked poultry products, including highly specialized cuts for retail and foodservice customers throughout Asia and other export markets, including Europe. The processing locations in the Netherlands and the United Kingdom are supported by in-house innovation capabilities for developing further-processed chicken products for retail and foodservice customers throughout Europe.

"It's estimated that approximately 90 percent of global protein consumption growth will occur outside the United States, with 60 percent of the volume growth coming from Asia over the next five years," said Donnie King, international group president for Tyson Foods. "Increasing our international footprint with in-country operations and export capabilities will help Tyson Foods strategically access new markets and better serve the growing global demand for our value-added protein."

The transaction is expected to close before the end of the company's fiscal third quarter and is subject to customary closing conditions, including regulatory approvals.

April

Pet Food Forum

April 29–May 1, Kansas City, MO • www.petfoodforumevents.com

May

Animal Agriculture Alliance 2019 Stakeholders Summit

May 8-9, Kansas City, MO • www.animalagalliance.org/summit

FENEGRA 2019 - Brazilian Rendering Congress

May 15-16, Campinas, Sao Paulo, Brazil • www.editorastilo.com.br

June

National Renderers Association Central Region Meeting

June 5–7, Minneapolis, MN • Contact Tom Beseman at tbeseman@centralbi.com or (507) 430-4844

European Fat Processors and Renderers Association 20th Annual Congress

June 12–15, La Baule, France • www.efpralabaule2019.com

American Meat Science Association 72nd Reciprocal Meat Conference

June 23–26, Fort Collins, CO • www.meatscience.org/events-education/rmc

Pet Food Alliance Meeting

June 26–27, Fort Collins, CO • www.fprfalliance.agsci.colostate.edu

July

Australian Renderers Association 15th International Symposium

July 23-26, Tasmania, Australia • www.arasymposium.com.au

August

Association of American Feed Control Officials 2019 Annual Meeting

August 5-7, Louisville, KY • www.aafco.org

4th Annual Canadian Beef Industry Conference

August 13–15, Calgary, AB, Canada • www.canadianbeefindustryconference.com

September

2019 Feed and Pet Food Joint Conference

September 30-October 2, Kansas City, MO • www.ngfa.org

October

Poultry Protein and Fat Seminar

October 3-4, Nashville, TN • www.uspoultry.org

American Fats and Oils Association Annual Meeting

October 16-17, Chicago, IL • www.fatsandoils.org

National Renderers Association 86th Annual Convention

October 28-November 1, Carlsbad, CA • www.nationalrenderers.org

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