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The year 2011 marks a major milestone...Render begins its fortieth year in publication. That’s quite an accomplishment for a magazine about an “invisible industry” that no one knew anything about back in the early 1970s. But times have changed, the government’s and public’s thinking has changed, and it’s time everyone knew about the “greenest industry.”

Render has been serving the rendering and affiliated industries for four decades, first primarily on the West Coast, then expanding across the United States, and eventually reaching out across North America and the world. Renderers, livestock producers, government regulators, feed manufacturers, and now biofuels producers absorb the stories printed on these pages that address challenges and opportunities faced by a global industry. There is no other publication in the world like Render.

For that reason, Render’s tagline, “The National Magazine of Rendering,” has been changed to “The International Magazine of Rendering” as we reach out to a more global audience, a more global industry.

The rendering industry has seen a lot of changes in the past 40 years, and Render will take a look back over the past four decades to highlight some of those transformations, such as new markets the industry has embraced beginning with biofuels in this issue.

We’ve also taken this milestone opportunity to refresh the pages of Render just a bit to create a cleaner, easier to read magazine as we all go about our busy, electronic lives. And while the majority of readers still prefer to receive “The International Magazine of Rendering” in its traditional printed form, Render continues to be available as a pdf on our Web site at www.rendermagazine.com for those who prefer an electronic version.

But no matter in what manner you flip through the pages of this 40-year-old magazine, in whatever country, we hope you continue to absorb, learn, and help promote this invaluable industry, its people, and its service.

Here’s to the next 40 years!  

R

www.rendermagazine.com
Whither Obama and Congress?

Now that the dust has settled on the November 2010 elections and the House Republicans are busy naming committee chairs, panel members, and redecorating the former majority’s offices, everyone is over-dissecting the recently completed lame duck session to determine how compliant President Barack Obama is going to be when it comes to his version of bipartisanship, and how committed Speaker-designate John Boehner (R-OH) and his new majority will be to the folks and the issues that gave them the majority to begin with. The Senate, for all intents and purposes, is the same game it’s been for the last four years, just with more opposition players. Its role will be to tackle the issues too prickly for the House and ensure nonsense by either party’s definition does not get traction.

Not to put too fine a point on it, but the lame duck session of Congress was not a political barometer of the next two years. It was, essentially, the GOP’s opportunity to clear the decks of a lot of unfinished business that will now not distract from the new majority’s push over the next two years. For good or not, issues dealt with during lame duck allowed the Democrats to claim some victories; for the Republicans, some major issues were resolved, allowing for a much broader agenda during the 112th Congress.

For the GOP, the big wins included extension of all the President George W. Bush-era tax cuts for a full two years, and a one-year extension, retroactive to January 2009, of a whole shopping cart full of federal business tax credits – including those for biodiesel, renewable diesel, ethanol, and the alternative fuel mixture credit – as well as a reasonable rewrite of the estate tax and a patch for the alternative minimum tax. These are core issues for the Republicans. For the Democrats, they got an extension of unemployment benefits and some ancillary social issues, but they also more firmly entrenched their image as the party of “gimme.” The repeal of don’t-ask-don’t-tell was a throwaway for the GOP; it played to an Obama 2008 campaign promise.

Turning fiscal year (FY) 2011 spending from appropriations bills into a monster continuing resolution is a calculated strategy by the Republicans. Rather than accepting the Democrats’ last hurrah in the spending wars, the GOP punted the FY 2011 spending bills into a system they will control, and the long knives are drawn and being sharpened. The Development, Relief, and Education for Alien Minors, or DREAM, Act defeat in the Senate was a major win for the GOP because now it will control the immigration reform debate.

The White House pretty much took credit for everything and anything achieved by Congress. This is the nature of a first-term president who gets pummeled in a mid-term election. But the bigger question is this: Does the president take a page from the Bill Clinton handbook and move toward reelection in 2012? Or does he remain a true progressive, keeping his issue papers close to his heart and risk becoming the Jimmy Carter of the twenty-first century? It’s folly to believe Obama does not wish to be a two-term president, so count on the White House becoming less progressive as the next two years wind down to the 2012 national elections.

The House GOP has already thrown down the gauntlet on spending, deficit reduction, and smaller federal government, and these fiscal challenges will be Obama’s biggest headache. If Boehner’s plan to return government discretionary spending levels to FY 2008 levels plays out, Obama is going to watch any number of his pet projects come under increasing fire. To his credit – both fiscally and politically – the president has already signaled his desire to deflate spending, having recommended fairly flat budgets for the last two years and ordering his departments to make additional five percent cuts overall. But the real challenges lie ahead.

How does the Obama administration implement health care reform as enacted if the White House budget recommendation is flat? It must rob Peter to pay Paul, as it recommends wholesale funding shifts from across the government to pay for the increased administrative and program costs of health care reform. At the same time, this White House is smart enough to watch closely which sections of health care reform are targeted during the House GOP’s aggressive oversight of the health care law, knowing full well the new law carries a whole lot of pork, fat that can be trimmed without damaging the underlying Obama priorities. The key becomes can the White House perform the triage necessary to hold the line with House Republicans and moderate Democrats who believe the entire law is a leap too far by the federal government?

A separate spending challenge for both Republicans and Democrats will be the recently enacted food safety reform law. How does Congress pay for the biggest rewrite of Food and Drug Administration (FDA) authority in more than 70 years? This sets up a seriously ugly appropriations committee battle on both sides of the hill. While the House bill called for a de facto tax on companies required to register with FDA under the new law – they called it a “user fee” and capped it at $150,000 per year per facility, keeping in mind a “facility” is a plant, a separate warehouse, a separate office building, etc. – the Senate bill only authorizes fees for the cost of a recall, the reinspection of a plant, and a voluntary expedited import inspection program or export certificates, all essentially costs that should be borne by business since they emanate from missteps or business development.

The White House has an edge in the appropriations battle because at most the president’s budget is considered a “recommendation” by the appropriators on Capitol Hill. Generally, the president’s budget is dead on arrival because the appropriations committees in both chambers vote on the budget. The White House can recommend directing money from one end of the federal government to the other, but if Congress ignores that recommendation, then who bears the blame? We call this splendid deniability.
The president has the power of the veto, but I expect he’ll use it only in the cases of serious priorities threatened with extinction. He must be careful because he risks the legacy label: He who condemns our children and grandchildren to lives less bountiful than ours because he spent the government so far into debt it can never crawl out, all for a personal legacy, a progressive agenda, all for the glory of the Democrat Party.

Boehner faces the challenge of putting the money where the GOP’s mouth is, and he and his party face moral/ethical challenges the president does not. Does he scrap great huge chunks of the health care reform law – which recent polls show folks may be warming to, and even his party acknowledges carries some good stuff – in the name of spending and deficit reduction? What does this do to the overall availability of health care for the masses, as in who gets treated and who doesn’t? Does Boehner belly up to the FDA bar and demand dollar increases for food safety regulation, or does he wave the wand of spending control and tell folks to just be more careful in how they handle and prepare their food?

The last couple of paragraphs are kind of snarky, but they illustrate the most cynical and political manner in which both parties will be portrayed. However, both Obama and Boehner are smart people, and very adroit and professional politicians. Both like the jobs they have and desperately want to keep them. Where they differ is that Boehner is a streetwise dealmaker, and the president is someone who reacts better than he initiates.

I look to the White House to covet four more years more than it covets an etched-in-stone party agenda, and for this it will suffer the slings and arrows of its own party. I look to the House GOP to get creative in how it addresses issues while remaining as true to the folks who put them in the majority as the real world of Washington, DC, will allow. Boehner will take major hits if his actions are not as conservative as his words. Neither side will get everything it wants and the spinmeisters will work overtime for the next two years. There will be much blame placed and much credit taken. Let’s hope those in the real world are the better for it.
Still Growing Strong at 40!

Magazine publishing is as cyclical as any industry, including the rendering industry. New publications start-up and are either successful very early on, or crash and burn within a matter of years, if not months. Like any business, magazines depend on sales revenue and a solid, quality product that is in high demand to sustain challenges from competitors or technology. But even long-time successful magazines, e.g., Life, can eventually meet their demise due to forces beyond their control.

However, one publication that was embraced from day one is still going strong as it begins its fortieth year in print: Render. Granted, with no competition, success can only be expected. But continued support from a multitude of organizations, companies, and individuals, and an industry that longs for knowledge, has fueled this achievement for what is now referred to as “The International Magazine of Rendering.”

A Winner from Day One

The Pacific Coast Renderers Association (PCRA) began putting out a small newsletter-type publication in the late 1950s titled Render as a way to disseminate news to its members. It was soon realized that industry-related information needed to reach a broader audience and be published more often than quarterly. So, after an extensive search for just the right individuals who could take on the task, in February 1972, the rendering industry had its own publication, Render, to inform PCRA members, customers, vendors, appropriate regulatory officials, government leaders, and those in associated industries on developments of interest in the rendering industry. The magazine was distributed free-of-charge as a public service to qualified individuals, including non-members of the association, a practice that continues today.

The first issue of Render, published every other month under the direction of Editor Frank A. Burnham, examined the “invisible industry,” which boasted “more than 300 companies involved in rendering,” including 245 independents with the others being ancillary operations to major meatpacking firms. At the time, U.S. renderers converted 30 billion pounds of inedible meat by-products into 10 billion pounds of useful rendered materials annually (compared to 59 billion and 35 billion, respectively, in 2010). Other topics Render reported on the first year was the beef and poultry industries, pollution control, separate interviews with the Sierra Club and expert nutritionist Dr. Thomas Jukes, and exporting.

The second year saw accolades pour in from the rendering and affiliated industries. Among the many subjects Render covered was the Environmental Protection Agency’s plan to develop water pollution standards for 27 industries, including “meat product and rendering processes.” The magazine also examined trans-ocean transport, the Asian market, including Japan’s soap business, odor control, organic food products, animal nutrition, the energy crisis, and a report on the “invisible industry” appearing “imminently visible” to a host of federal, state, and local government agencies. At the end of its second year, Render began publishing what would become an annual report on the industry, providing statistics on proteins, fats, and greases and a glance into what the next year could bring.

In its third year, Render featured a special report on the National Renderers Association (NRA), discussed the Food and Drug Administration’s new Salmonella “voluntary” control program for the feed industry, and reported on grease thefts occurring across the United States due to the price per barrel of used grease soaring from $12 to $48.

Render’s fourth year in publication examined tallow, rendering “down under” (Australia), synthetic lubricants, and saw its subscriber base reach 7,500, not a bad growth rate for a new trade publication.

“We are pleased with the way Render has been accepted by the industry nationwide,” K.R. “Dick” Ellis, chairman of the PCRA Public Relations Committee, was quoted in the December 1975 issue of the magazine. “We in PCRA started out to do what we could to provide the industry with its own professional trade publication. We think we have accomplished that goal and certainly intend to continue to support that objective.” PCRA financially supported Render until the NRA assumed sponsorship in 1979 and continues to do so today. Render, operated as a non-profit, eventually became self-supporting by an increase in advertisers who invaluably contribute to the magazine’s ongoing success along with the wealth of talented industry individuals who provide informative articles.

In Render’s fifth year, tallow continued to be a topic of discussion along with palm oil, energy conservation, preventive maintenance, and fats in animal nutrition. But perhaps the biggest news was Render’s recognition as the best “manufacturing” magazine by the Western Publications Association for the October 1976 issue. The coveted “Maggie” was also awarded to Render in 1978 for “best agriculture and farm magazine.” And in 1991, the industry received front-page real estate in one of the country’s most prestigious newspapers, The Wall Street Journal, from an article written about Render and Burnham “going to bat for fat.”

Industry Thirsty for Knowledge

Those first five years proved the rendering and its affiliated industries longed for a valuable and dependable source of information and found it among the pages of Render. It also confirmed to PCRA leaders that the rendering industry had a story that needed to be told. That tale took the form of the industry’s first book in 1978, Rendering – The Invisible Industry, written by Render’s editor, Frank Burnham. The
book covered the history of rendering; the industry as it existed in the 1970s; its social, environmental, and economic impact; its products, markets, and end uses; supporting industries; trading systems; and the industry’s future.

As then PRCA President Don Heddleston put it, “Certainly at one time we were invisible and wished to remain so. That time is long past. It is essential today that rendering be understood by the public and its contributions to society be accepted. Publication of this book, which we hope, through the industry, will find its way into the high schools and universities of this nation, is but another step.”

It was nearly 20 years before the industry published another book in 1996, *The Original Recyclers*, a joint venture between NRA, the Animal Protein Producers Industry, and the Fats and Proteins Research Foundation and edited by Dr. Don Franco, director of NRA Scientific Services at the time, and Winfield Swanson. A third book, *Essential Rendering*, edited by David Meeker, vice president, NRA Scientific Services, was published 10 years later, in 2006, after many changes had taken place in the industry in the decade prior. Both books featured multiple chapters written by industry experts in the areas of animal nutrition, technology, edible rendering, environmental issues, industry research, and the future of rendering in the twenty-first century.

**A Thriving Global Publication**

Over the past four decades, *Render* has focused on many of the same issues covered in those first five years coupled with a myriad of other challenges, government regulations, markets, animal diseases, technologies, and company news affecting the North American and global rendering industry. Two constants first begun so many years ago still remain a part of *Render* today – the yearly industry market report and NRA membership directory (which was first published in 1980), both highly anticipated features each April issue of *Render*.

The world has changed dramatically in the last 40 years: the world population has nearly doubled from 3.8 billion people to a projected seven

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For years, renderers have watched the ups and downs of the emerging biodiesel industry. As soybean prices shot up in 2007, biodiesel producers looked to the rendering industry as its next generation feedstock supplier. Since then, the biodiesel industry has struggled through market volatility but has become a significant market demand center for the rendering industry. Today, biodiesel industry forecasts call for more stable markets and growing demand through the Environmental Protection Agency’s (EPA’s) renewable fuel standard, or RFS2, and improved production technology.

Steady Growth as Reliable Partners

U.S. Census Bureau data paints the picture of a growing marketplace for non-soybean oil feedstock in biodiesel consumption. While data categories for feedstock are clearly divided, there are some months when there is not enough data in particular categories (e.g., inedible corn oil) to report non-soybean oil feedstock that moves within the marketplace. What is clear is that since January 2007, non-soybean oil feedstock utilization in the biodiesel industry has grown by nearly 40 percent. That’s 40 percent more beef tallow, pork lard, inedible corn oil, yellow grease, and used cooking oil being converted into biodiesel (Chart 1).

In 2008, the U.S. biodiesel industry produced more than 750 million gallons of biodiesel. During that record production year, nearly 80 percent of all biodiesel was produced from soybean oil. Approximately one-third is estimated to have been shipped to Europe before a 2009 tariff essentially closed the U.S. market overseas. With a closed export market, U.S. biodiesel production dropped to approximately 450 million gallons in 2009 as biodiesel producers shifted their marketing efforts back to U.S. distillate blending. In 2010, biodiesel producers faced limited demand (approximately 350 million gallons) due to uncertainty created by the lapse of the federal biodieselblenders’ tax credit.

While it’s true that U.S. biodiesel plants ran at severely reduced rates in 2010, the industry is capable of responding to demand by bringing back idled production capacity in 2011. More than 2.2 billion gallons of production capacity is registered with EPA to generate renewable identification numbers (RINs).

With a strategic business model in a tumultuous market year, biodiesel producer and marketer Renewable Energy Group (REG) retained market share by maintaining a focus on domestic markets. While the biodiesel industry faced one of its most disruptive years in history, REG acquired six biodiesel businesses, including four manufacturing facilities. The company, headquartered in Ames, IA, is now the nation’s largest biodiesel producer with more than 180 million gallons...
of manufacturing capacity and, in turn, has a growing appetite for triglyceride supplies. Like other major biodiesel producers, REG estimates it must run near maximum capacity to meet the nearly 65 million gallons of biodiesel demanded each month by this year’s 800 million gallon RFS2.

“With RFS2 implementation beginning in 2011, we see the potential to double our feedstock purchases in 2011 as compared to 2010,” explained Dave Eisenbast, vice president, Supply Chain for the company. As the demand for animal fats in biodiesel grew, REG looked to used cooking oil as an additional feedstock source. But as animal fat prices continue to track upward with energy prices and feed prices, inedible corn oil is playing a larger role in REG’s feedstock sources.

Rendered Material Demand Doubling?

Some renderers are playing in the biodiesel marketplace while others remain on the sidelines. Those partnering with biodiesel plants are seeing the value in their bottom line. In 2007, renderers were receiving an average of 15 cents per pound for beef tallow. Today, prices are tracking in the upper 40-cent range due to increased demand in the fuel market (Chart 2). With RFS2, the market is about to get bigger.

“We wanted to see viability in the biodiesel industry and waited until we had a relationship with buyers before we offered too much of our supply,” said Tim Norman, vice president, Sales and Marketing for Mahoney Environmental, a renderer and used cooking oil collection agency headquartered in Joliet, IL. “We have been reluctant to work with biodiesel start-ups because we often need to be in a pre-pay situation and it’s more convenient for our business to wait to partner with biodiesel producers until they’ve matured.”

Mahoney, like most renderers, carefully monitors the spread between the feed and fuel markets.

“Up until September 2010, there was a divergence in the value as fat for fuel outpaced feed demand,” explained Norman. “We’ve seen a pickup in the feed value in the last quarter and both markets seem to be on par again with corn prices and heating oil values. Today, we have feed and fuel value charts that overlap, but I think we’ll see another separation. The fuel market could offer six to eight cents more than feed as biodiesel demand is driven by RFS2.”

Norman added that the company is comfortable selling 35 to 40 percent of its total volume into the biodiesel marketplace and anticipates that number increasing in 2011.

“We are watching to see how the market corrects from the biodiesel blenders’ tax credit and what RINs are doing,” Norman commented. “Some renderers will still be reluctant, but the big players are ramping up production.”

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Biodiesel Outlook Continued from page 11

Reducing Seasonality with Advanced Biofuel

One of the biggest concerns renderers face in the biodiesel industry is seasonality due to product cloud point. If consumers want the lowest cloud point biodiesel possible, they often shy away from animal fat-based biodiesel. REG focuses on domestic winter markets for higher cloud material. In 2010, the company announced a three to seven million gallon contract to ship to Hawaii biodiesel produced from animal fats and used cooking oil.

The high cloud point biodiesel performs flawlessly year round in Hawaiian Electric Cooperatives’ 100 percent biodiesel-powered 110-megawatt combustion turbine generator unit. In August 2007, the Natural Resources Defense Council and Hawaiian Electric established an environmental policy for the procurement of biodiesel. REG is supplying high quality biodiesel processed from used cooking oil and animal fat. The council indicated that this is likely to represent a positive environmental approach.

“These warm winter regions and progressive local governments are a key part of our rendered material market strategy,” said Elsenbast. According to EPA’s RFS2 compliance requirements, biodiesel produced from used cooking oil and animal fats reduces greenhouse gas emissions by more than 80 percent as compared to petroleum diesel.

“Because we are utilizing used cooking oil, inedible corn oil, and animal fats in addition to vegetable oil, we are able to supply RINs for both the biomass-based diesel and advanced biofuels categories,” Elsenbast stated. “Being a low carbon, advanced biofuel is a significant market opportunity for rendered material-based biodiesel. California’s Air Resources Board and many other states are looking at solutions for emissions and energy independence. The rendering industry will be able to play a more active role in meeting national energy and air quality goal attainment going forward.”

Confidence in Quality

Production technology at biodiesel manufacturing sites will be the true test of how rendered materials will play into the RFS2 biodiesel landscape. Bob McCormick, principal engineer for Fuels Performance at National Renewable Energy Labs, has been analyzing nationwide biodiesel quality trends since 2004. In early years of the industry, with so few producers, about 10 million gallons of mainly soy-based biodiesel was produced and nearly every gallon was on-spec.

“In the 2006 range, the industry experienced explosive growth and a drop-off in quality,” McCormick said. “Rendered material was becoming a larger portion of the marketplace, but when it came to quality, many producers weren’t paying attention.” In response, the voluntary National Biodiesel Accreditation Commission BQ-9000 program was implemented.

“In 2007, we saw improved quality overall,” McCormick noted. “And rendered material accounted for 30 percent of the marketplace’s feedstock.” He added that while rendered materials such as animal fat can have some challenges in cold temperature areas, they offer biodiesel consumers a performance advantage.

“With more saturated fats, the cetane number gets higher in the finished fuel,” explained McCormick. “Diesel's cetane minimum is 40. Animal fat biodiesel could improve that to 62 or 63, which offers easier starting, especially in cold weather, and smoother engine operation. Rendered material biodiesel blended to B20 [20 percent biodiesel] could improve the blended fuel’s cetane by as much as four points, a noticeable performance difference.”

REG’s network of owned/operated facilities includes technology allowing for conversion of both low (vegetable oil) and high (animal fats, used cooking oil, inedible corn oil) fatty acids. In addition to its own construction technology, the company has upgraded several acquired facilities in order to add high free fatty acid capabilities.

The 45 million gallon per year facility in Danville, IL, was engineered by Desmet Ballestra. Production of biodiesel from low free fatty acid feedstocks began in September 2008, and in April 2009, construction upgrades, including a newly installed pretreatment process, allows the facility to now utilize a wider array of high free fatty acid feedstocks like animal fats, inedible corn oil, and used cooking oil. The facility was awarded BQ-9000 producer status in July 2009 and was purchased by REG in February 2010.

Continuing to Build with the Biodiesel Industry

Over the last decade, the rendering industry has steadily grown as a partner with the biodiesel industry. Biodiesel quality programs will continue to advance the performance and management of fuel for all climates, year-round. ASTM International’s biodiesel committee continues to take aggressive action in making biodiesel a commodity fuel that will improve the distillate marketplace.

Federal, state, and regional policy programs continue to advocate for a sustainable multiple-feedstock approach to reducing the United States’ dependence on foreign oil and improving air quality. RFS2 creates steady demand for biodiesel during the next decade and additional state incentive programs will drive demand for the product into retail locations.

Commercial-scale biodiesel producers with the advanced technology to utilize feedstock up and down the triglyceride spectrum will be the partners of choice for both petroleum and rendering companies. Confidence is growing along the supply chain and renderers should consider new partnerships in this exciting industry.
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**DUPPS**
Won’t Let You Down
I have written such articles before, but as I sit down to write this one, I’m resisting the urge to go back and look at what I predicted for the rendering industry a few years ago – I’m starting with a blank page. Having just begun reading The Autobiography of Mark Twain, I admire his method of speaking randomly on topics of interest with no sense of chronological order or worry of completeness. However, you will not have to wait a hundred years to see this list, nor will it be a literary marvel, but I hope it will be of interest to renderers.

1. More Regulation

One does not have to be clairvoyant to come up with this one, but industry does have a wave of new things coming regarding food safety. The new laws and regulations are not necessarily bad news, and in many ways reflect successes of the National Renderers Association (NRA) and others in keeping them reasonable. Given the “lay of the land” and a regulatory environment, the question has never been whether or not to have more food safety regulations, but what form they would take.

The so-called lame duck session of Congress in December 2010 passed a number of laws, including the Food and Drug Administration (FDA) Food Safety Modernization Act. It is no accident that this new law follows closely the program laid out by NRA and the Animal Protein Producers Industry (APPI) in the Rendering Code of Practice. The centerpiece of the bill is the requirement for identifying a plant’s hazards and developing a written risk management plan for those hazards, just as the rendering industry has been doing in its Code of Practice for the past five years.

However, there is much work ahead as many of the sections of the act require rulemaking and compliance guide development by FDA on a specified timeframe. NRA will continue to be involved. On a plant level, it is critical to be involved in the Rendering Code of Practice if you are not already. The APPI Committee of NRA will hold another members-only training session on the code this June.

Another regulatory activity at FDA is the Draft Compliance Policy Guide for Salmonella in Animal Feed. NRA, APPI, and other feed industry organizations have fought for more than 20 years to get FDA to approach Salmonella in a more reasonable way. If finalized as drafted, the new policy guide for Salmonella will for the first time codify in regulation the approach of separating food and feed in terms of Salmonella policy, and consider species-specific serotypes when analyzing hazards reasonably likely to occur in feed. However, this progress on species-specific serotypes dictate that the rendering industry’s process verification testing also be more specific to rule out the serotypes of concern. Each plant should review its testing strategy to be in the best position possible to prevent recalls and other challenges that can be avoided.

After relatively good news on the FDA regulation front (compared to how it could have been), it’s much more difficult to find a silver lining in what the Environmental Protection Agency (EPA) is doing. EPA has been a very “activist” agency, promulgating a large number of regulations with no regard for the impact on the economy or jobs. One thing to watch here is the new Congress and how the less regulation-friendly senators and representatives dream up ways to slow down or stop the current EPA administrators. The incoming chairman of the House

The end of every year brings an endless amount of “best-of lists” and a spate of predictions for the coming year that have little chance of being correct. However, that doesn’t stop political pundits, financial moguls, or industry technicians like me from trying to imitate Nostradamus.
Energy and Commerce Committee has said he opposes the regulations on greenhouse gases and indicated he would lead efforts to revoke EPA regulations in the next Congress. Even if some of the new EPA regulations are revoked, there will be increasing restrictions on emissions to both air and water.

Senator Mark Warner (D-VA) came up with an excellent idea. He said that in the last 20 years, there have been 130,000 new regulations and the burden is starting to choke business, stifle innovation, and negatively impact the economy. Warner proposes that any agency recommending a new regulation offer to get rid of one already on the books. It would be great if this became a trend.

2. Everyone Wants a Say in Food Safety

Most of the food regulations described above were a result of this continuing trend. An overabundance of cheap, tasty, nutritious, safe food may even be partially responsible for the public abdicating their own role in what can make them sick. Food safety is even morphing to include animal welfare issues and human obesity.

Some want to take all decision power away from American citizens so some food choices are not even offered as if people have no control over what they put in their mouth. But the core of the trend is a few well-documented cases of people getting sick from an avoidable food contamination. With pulse-phase DNA fingerprinting, much enhanced inventory control and traceability, and new regulations, there’s no place to hide. Coupled with a very aware public and fantastic diagnostic tools in health care, there will continue to be great scrutiny on food production as every case is found and publicized.

In all likelihood, the number of mortalities and morbidity in this country are probably at an all-time low, but the expectation is zero. The president, Congress, FDA, state governments, activist groups, and customers all want a piece of this action. Marketers will even use any edge as a wedge to disparage the competition. The best strategy here is to run a very tight ship, improve continuously, and always operate as if you are being watched.

3. Sustainability

There have been many false starts over the last 30 years. In the early days, sustainable agriculture was promoted by a few dedicated out-of-the-mainstream farmers and encouraged by activists. But those trying to make a living from the land had the image of sustainability requirements becoming a heavy ball and chain dragging them down and making them non-competitive.

Now, the concept of sustainability is becoming much more robust and economically feasible by considering the “triple bottom line” of social responsibility, environmental performance, and profitability (also known as “people, planet, profit”). This is something the rendering industry can live with because renderers have been doing the many important parts of this for over 100 years. Our challenges in the near future will include convincing regulators that regulating renderers out of business would cause great environmental harm, and convincing the rest of animal agriculture that they cannot approach true sustainability without partnering with the rendering industry.

4. Redefining “Natural”

As much as it annoys those who are efficiently producing safe nutritious food in the mainstream, the marketing strategies of “organic,” “natural,” and “local food” are gaining at least niches that garner attention. As soon as a niche gets big enough to be profitable, a big multinational corporation takes notice and targets that market to the chagrin of the activists. The truth is that the world cannot be fed without the multinational corporations, and it cannot be fed with organically grown local food. In any case, there is talk now about redefining “natural.” This means those involved in the niche are competing with each other with differing standards and they want regulation to level the field.

The same thing has happened in the organic world, with 20 years of hammering out regulations, the U.S. Department of Agriculture oversight, and so on. Most of this will be an esoteric exercise among those involved, but there’s some caution for the rendering industry. The best case scenario would be if these marketing niches set their standards to mitigate actual risk from real hazards, but that is probably too much to ask from marketing schemes.

Somewhere in the lore of organic and natural it became popular that animal feed should be “vegetarian.” Nothing scientific about it, it’s not even “natural” for most animals, but it will be a challenge for the rendering industry to not become a target.

5. Humanizing of Pets and Livestock

We are almost all guilty of thinking of our pets as nearly human. They are so cute, they do incredible things, and most of them love us without reservation. This is all fine. In fact, it is mostly good for rendering as the pet food business soars. But people don’t know how to draw boundaries. Many extrapolate the same feelings to chickens, pigs, and cows. Rendering is inextricably linked to the livestock industries as both our suppliers and customers. The animal rights issue is hitting animal agriculture hard and most of the criticism is undeserved. Animal agriculture is searching for new ways to respond and strategic ways to counter multimillion dollar ethics-challenged campaigns against modern production methods. This can affect us all and should be taken seriously.

6. The Digital World Races

Moore’s law describes a long-term trend in the history of computers. The number of transistors that can be placed inexpensively on an integrated circuit has doubled about every two years for more than 50 years. The capabilities of many digital electronic devices are linked to this trend: processing speed, memory capacity, sensors, and the number and size

Continued on page 16
of pixels in digital cameras. This has dramatically increased the usefulness of digital electronics in nearly every segment of the world economy and is a driving force of technological and social change throughout the world.

Rendering may be a straightforward, simple process of logistics, cooking, drying, and marketing, but our world is impacted as much as any other. Newer concepts such as cloud computing, cloud data storage, social networking, and i-everythings are leading to a lack of privacy, insecurity of business secrets, and everybody watching everybody else with no real understanding of what is going on. Almost anything of an electronic nature is obsolete within five years. It will continue to be a struggle to keep up, but many things we don’t think we want (because we can’t even imagine them yet) will make our lives better and help us do our work more efficiently. It will be difficult to ignore all of this and remain relevant ourselves.

7. The Research Crunch

For the last 60 years, the average annual rate of return on public investments in agricultural research and extension has been 48 percent. For most of that time, it has been undervalued, disrespected, and underfunded. The increases in agriculture productivity are surprisingly similar to the digital world described above, but you would never know it listening to the food critics.

The funding situation continues to get worse. Real (inflation-adjusted) federal funding of agricultural research and education programs has declined during the past decade both in absolute real terms and in relative terms to other federal research programs, and to the significance of the food sector. Researchers at land grants and other institutions spend so much time seeking grants to make up the shortfall in state and federal funding that it is hurting productivity.

This trend will lead to more privatization of research. Companies that could make up the difference in funding are more interested in research that helps their own bottom lines by giving them a competitive edge (and rightly so) than they are in giving money to replace public funding that requires full public disclosure of all findings. We will continue to see great technological advances in agriculture, but it may be much less transparent and more often “pay-to-play” than we are used to.

8. For Every Reaction

This section doesn’t describe a trend, but is an observation about the ridiculous nature of most trends.

It seems the bandwagon is always full. During the housing bubble everybody wanted to buy overpriced property. Now, with an abundance of low priced homes, many people with good credit can’t meet the new credit guidelines – another over-reaction to a problem.

Two years ago, the death of the U.S. auto industry was widely assumed, yet recent fiscal quarters broke profitability records. Every spike in fuel prices brings predictions of $5 a gallon gasoline and the end of cheap fuel; but we continue to have cycles in fuel, and every other commodity.

It’s very difficult to be a contrarian investor; even more difficult to be a contrarian in business strategy. However, there could be great opportunity in examining “herd behavior” and figuring out when it’s overdone and about to swing wildly in the other direction.

“Whenever you find yourself on the side of the majority, it’s time to pause and reflect.”

– Mark Twain

The trend prediction here is that trends, bubbles, and fads will continue and most of them will be over-baked at some point, which will create opportunity for the nimble.

9. Global Demand for Everything

The rise of China and India is well-documented, and was showing up on top 10 predictions 15 years ago or more. But now we are hearing daily about Brazil, Turkey, Russia, Colombia, and others.

Since the 1950s, the rendering industry has been among the most aggressive sectors of agriculture in exporting. But, the context is changing. Rather than a few developed nations selling to many developing countries things they can’t produce themselves, we now compete in a global market among many capable industries and economies, in both selling and buying.

The recession stopped or slowed growth in many infrastructures’ production capacity, especially in the United States, and as demand blossoms there will be shortages of many commodities. While we welcome strong markets and high prices for proteins and fats, costs will rise for fuel, concrete, steel, and most everything else we need. Even with good prices, the rendering industry will need to use sharp pencils in business strategies.

10. Economic Recovery

The media seems to love misery, and most reports heard following a great retail holiday season included the caution, “but it likely won’t last.” Nevertheless, there are many signs of economic improvement, not only in the United States, but globally. The world population continues to grow, demand for food products of animal origin continues to increase, and business opportunities in the coming decade will likely be very good. Even though the agriculture sectors have been generally healthy throughout the recession, things could get much better.

The rendering industry is well-positioned to be part of the sustainability movement in many ways, including offering fish meal replacement for aquaculture, closing the loop in animal agriculture by producing usable products from what would be waste, providing feedstock for biofuel, and sequestering carbon in feed ingredients lessening the need for more crop acres.

The rendering industry is well-positioned to cope with new food safety regulations and increased scrutiny of animal feed production. The industry is even positioned well environmentally in spite of the current regulation-happy EPA.

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Is There Biodiesel in Your Future?

Author’s Note – This article begins with congratulations and accolades to Render, The International Magazine of Rendering, on its fortieth year of service to the industry. Frank A. Burnham, the first editor of Render, and his granddaughter, Tina Caparella, upon assuming the editor and publisher role in 1996, have for forty years brought the industry to international recognition. To their credit and their influence in keeping biodiesel and biofuel as well as other rendering issues in the international media limelight for four decades has been an exemplary asset to the rendering industry.

It was in the October 1992 Render that Frank Burnham used the above title to introduce biodiesel to the rendering industry. The article reported on a small biodiesel pilot plant in Kansas City, KS, designed and built by GraTech, a subsidiary of STRATCO that was an established supplier of high-tech subsystems for gasoline refining. It was at this facility that the Fats and Proteins Research Foundation (FPRF) initiated a project for the development of processes of using animal tallow for the commercial development of bio-diesel fuel in the United States.

The American Soybean Association (ASA) was also at this time testing on-the-road vehicles fueled by soy-based biodiesel. The National Soy Fuels Advisory Committee (NSFAC) was formed in May 1992 to pursue the project. The committee was made up of the Qualified State Soybean Boards of Missouri, Iowa, Illinois, and South Dakota to position soy diesel as the biodiesel of choice in the United States. Soon thereafter, the NSFAC was disbanded and the National Soy Diesel Development Board (NSDB) was formed. This organization provided for a budget, research, market development, and a staff structure to receive and fund research grants. More importantly, it provided a funding source from the United Soybean Board/ASA via the soybean checkoff program. That funding process was initiated October 1, 1992, and subsequently provided millions of dollars for biodiesel development.

Kenlon Johannes from the Missouri Soybean Merchandising Council was appointed the NSDB executive director and in his early correspondence wrote, “Biodiesel development itself will also require a planned cooperative effort from all feedstock providers.” However, “The NSDB will initially include only those interested in soy diesel, but as other groups interested in biodiesel feedstocks became identified, they may be brought into the organization with the possibility of ultimately forming an American Biodiesel Development Coalition.”

His vision was profound and his mannerism always very personable and respectful. However, as the development process evolved it became very evident that “those who have the gold make the rules.”

The biodiesel pioneers from the rendering industry were the three “Freds” and a Dennis – Dr. Fred Bisplinghoff, Fred Wintzer, Fred Wellons, and Dennis Griffin. These FPRF leaders attended the early NSDB meetings and explored pilot plant facilities that could esterify animal fats for the production of experimental biodiesel. It was the initiation of the quest in pursuing the vision that animal fats and oils deserved a place in the biodiesel/biofuels marketplace. I joined these pioneers in October 1993 in Kansas City, MO, in meeting with the NSDB members, all of which were soybean farmers. Again, all were very courteous and friendly, but likewise focused on seeing their checkoff dollars invested in soy oil utilization, a normal reaction from any good business person. Thus the reality and the learning process began in earnest.

The idea to use vegetable oils as fuels for diesel engines is more than a hundred years old. Rudolf Diesel himself conducted engine tests using plant oils. One of his engines was exhibited at the World’s Exhibition in Paris, France, in 1900 that ran on peanut oil. It performed so smoothly that visitors needed to be made aware of the fuel source. However, it was only during the 1970s that transesterification and biodiesel became commonplace in a number of European countries. Dr. Martin Mittelbach, University of Graz, Austria, was an innovative researcher that provided process technologies utilized in the expansion of the commercial market abroad, and also assisted with the U.S. development process.

Trials and Tribulations

Certainly there have been several trials and tribulations along the way. The decade of the 1990s brought several issues of great magnitude to the rendering industry. It brought the reality that the industry could have been decimated by the events of bovine spongiform encephalopathy (BSE). The decade began with tallow prices in the very low teens and even single digits per pound. At the end of the decade renderers and packers were burning their fats and oils to replace the unprecedented prices for burner fuels.

FPRF was fortunate to establish a dedicated biodiesel fund in 1993. Jerry Smith, then chairman of the National Renderers Association (NRA), made the plea at the 1993 annual NRA meeting for contributions to the fund that generated an amount exceeding six figures. This initial pledge and the continued generosity of the rendering industry provided the funding to support a neutral feedstock specification and regulatory and legislative agendas. Those battles have now been assumed by NRA. Maintaining parity among feedstocks within legislative and regulatory actions has been a constant challenge. Certainly, actions have not always resulted in the
equality that rendered fats and oils deserve.

The research investments have been utilized prudently
and to great advantage in bringing biodiesel and, subse-
quently, biofuel to acquire the status of quality renewable
fuels with environmental energy dependent qualities and
new markets for rendered fats and oils. The development road
has not been a straight shot. There were, however, several
milestones that can be noted that exemplified the progress.
The development of pilot plants that could provide quality
products for research and on-road performance studies was
challenging. Numerous “backyard” facilities in garages, tool
sheds, and abandoned airplane hangars fabricated from
buckets, glass jars, barrels, garden hoses, and nearly every
imaginable component came forth willing to be a part of
the action. FPRF had the honor of evaluating a number of
these enterprising operations in search of quality fuels for
research.

A noted study sponsored with the National Renewable
Energy Laboratory-The Institute of Gas Technology was
initiated in 1997 and significantly enhanced the image and
opportunities for animal fats and oils usage as biodiesel
feedstocks. A certified low-sulfur diesel fuel from Phillips
Petroleum was compared to methyl esters (biodiesel) using
the feedstocks of soy, canola, pork lard, edible and inedible
tallow, low free fatty acid yellow grease, and high free fatty
acid yellow grease. Nearly all ASTM International physical
and chemical standards for diesel were evaluated as neat
fuels but also at 0.25, 0.50, one, three, five, 10, 20, 35, and
50 percent blends with neat diesel. This study validated
and documented positive characteristics for animal-derived
feedstocks such as lubricity and lower costs of production.
Concerns were raised for slightly higher cloud point values in
the tallow fuels and a higher sulfur level in the yellow grease
fuels. It didn’t take the critics long to diagnose the problem for
the sulfur being derived from the onions fried in the yellow
grease. That hypothesis was never explored. This study,
concluded in 1999, dispelled a number of allegations.\textsuperscript{4}

Another milestone for biodiesel was the ASTM approval
of biodiesel fuel specifications. These chemical and physical
properties were developed on a feedstock neutral specification
basis. With an agreed-upon specification provided via ASTM
6751, an industry certification program was developed
for both biodiesel producers and biodiesel marketers. A
National Biodiesel Accreditation Commission was formed
and the BQ-9000 accreditation program was introduced for
certification in 2004. I was honored to become an inaugural
member of the nine member commission and served for six
years. George Kopittke, Griffin Industries, currently serves as
a commissioner.

The primary mission of BQ-9000 is to promote the
biodiesel producers and marketers that comply with quality
standards of assurance. There are currently over 40 biodiesel
producers and marketers BQ-9000 accredited, representing
approximately 75 percent of biodiesel currently sold.
Accreditation is becoming a pre-condition for purchase by
many users including original equipment manufacturers as
a requirement for warranty support. As with any third party
certification program an enhanced customer confidence is

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maintained. It is even more important in a developing market like biodiesel.

From its birth, biodiesel has been recognized as an environmentally friendly liquid fuel. However, to validate those claims despite the vast amount of tailpipe data, the Environmental Protection Agency (EPA) demanded that a massive and seven-figure health effects study be conducted. The protocol included a number of laboratory animal species exposed to biodiesel fumes over extended periods of time, sacrificed, and their tissues subjected to numerous chemical and histological testing. The test fuel was soy-based in an effort to eliminate duplicating the seven-figure project cost. The EPA reluctantly consented to allowing the test fuel to represent both vegetable- and animal-based feedstocks. This project, predominately funded by the National Biodiesel Board, was the first to complete the Tier 1 and Tier 2 health effects study on behalf of the industry and contracting its use to fuel producers.

**New Decade Brings New Challenges, Opportunities**

The new millennium had brought the still fledgling biodiesel industry to a status of accelerated progress that exceeded that of other alternative fuels, i.e., ethanol, which started its mission some four decades ago. Several soy-based production facilities were on-stream. Griffin Industries had brought its facility online in 1998 in Butler, KY. Several other rendering companies followed: Anamax, Central Bi-Products, Rothsay, with others in consideration.

The new decade brought exponential growth in biodiesel in both the United States and Europe as Chart 1 illustrates.

Biodiesel and biofuels have become an important and substantial consumer of animal fats and greases. In 2009, over 23 percent of U.S. produced biodiesel used these lipid feedstocks, providing a market for approximately nine percent of U.S. annual production. As the decade ends and 2010 data becomes available, undoubtedly the picture will darken. During the past year, and really throughout the last decade, the struggle to acquire a long-term energy policy that instills confidence in attracting long-term investments has not been evident. The on and off actions among regulations and legislation has not been consistent with a national policy of making the United States more energy independent. The recent lapse of the per-gallon blender credit on December 31, 2009, shut down a number of production facilities and essentially halted any new investments. The recent vote to reinstate the credit for 2011 and retroactively for all of biodiesel sold in 2010 is positive, but those actions are not likely to result in an immediate rejuvenation of the biodiesel industry. The stability of the blender’s credit still lingers as well as export duties imposed by a number of countries, hampering export opportunities.

As previously noted, the new decade brought new challenges, beginning with a period of unprecedented high prices for burner fuels such as fuel oils, natural gas, and propane. This challenge actually became an opportunity for animal fats and oils to be used as burner fuels. Just as Burnham had described the historical use of tallow for heat and light by our ancient predecessors in his book, *Rendering: The Invisible Industry*, renderers converted their energy sources to burning their own fuels.

**Chart 1. U.S. and European Biodiesel Production, 2001-2009**

- European Union
- United States

The conclusion: “Biodiesel produced from animals infected with TSE poses a negligible risk to human and animal health. This conclusion extends even to the use of specified risk material as a source of tallow.”

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Into the Future

Biodiesel and biofuels could become a book of its own. This highlight of significant accomplishments, trials, and tribulations omits a number of resources and personnel that contributed to the process. In reality, the progress made has been phenomenal. Unfortunately, the progress in making the United States less dependent upon foreign sources of petroleum-based energy has been minimal. As we enter the decade of 2011 with fuel prices on the rise again and projected to go higher, the importance of alternative sources must be recognized. The stabilization of energy prices is an important component for the country’s continued economic recovery. An extraordinary level of cooperation between policymakers, feedstock producers, and industry organizations as well as the research community will be required.

Collective efforts serve progress in a way fragmentation cannot. Past actions have exemplified the resolve that the rendering industry possesses. With that continued commitment, rendered fats and oils will continue to be a strong and sustaining component of biodiesel and biofuels in the future. Without doubt, Render will be translating the message to the world community.

References:
2. Dr. Fred Bisplinghoff, FPRF president 1988-1993; Fred Wintzer, president, G.A. Wintzer and Sons; Fred Wellons, Chemol; and Dennis Griffin, president, Griffin Industries, Inc.

Additional Credits:
Bev Thessen, National Biodiesel Board
Chuck Neece, Farmers Union Industries, LLC
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Sigh of Relief Heard ‘Round the Biodiesel Industry

Last year was a difficult year for the biodiesel industry as a blender’s tax credit of $1.00 per gallon that had been in place since 2004 ended December 31, 2009, making it cost-prohibitive for some biodiesel producers to continue operating. For those who were able to keep plants running, they did so at significantly reduced capacity. In all, the biodiesel industry produced less than half the alternative fuel in 2010 than it had manufactured just two years prior.

But after much haggling, the blender’s tax credit was finally included, along with a multitude of other credits, in the Tax Relief, Unemployment Insurance, Reauthorization, and Job Creation Act of 2010 signed into law just prior to the end of last year. The legislation retroactively reinstates the tax credit to January 1, 2010, and extends the incentive through 2011. The credit is structured in a manner that makes biodiesel price-competitive with conventional diesel fuel in the marketplace. The act also includes the reinstatement and extension of the alternative fuel mixture credit, which provides a 50-cent per gallon income tax refund for using animal fats as fuel in boilers.

While the industry celebrates the victory, it has its work cut out for it as the process of getting the tax credits extended beyond 2011 now begins. Biodiesel producers that had to shut down plants after the credit expired at the end of 2009 must now rehire employees, reacquire feedstock supplies, and restart equipment that has been idle, in some instances, up to a year. But the National Biodiesel Board (NBB) is confident that the tax credit will ensure the industry will be ready, willing, and able to meet the country’s advance biofuel goals in 2011, which were recently set by the Environmental Protection Agency (EPA).

“It would appear that the biodiesel industry is in a much better position to be successful in 2011 than at any time during 2010,” commented Jim Conway, Griffin Industries, Inc., and NBB treasurer. “Higher petroleum prices when coupled with excellent renewable identification number (RIN) values and now the $1.00 tax credit should make biodiesel competitive in the marketplace. The tax credit and RIN values when coupled with the renewable fuel standard mandate should make for a good year for those companies that are still financially prepared to do business.”

The mandate Conway refers to is the Energy Independence and Security Act of 2007, which amended the Clean Air Act to greatly increase the total required volume of renewable fuels each year, reaching a level of 36 billion gallons by 2022. To achieve these volumes, EPA calculates percentage-base standards each November for the following year based on gasoline and diesel projections from the Energy Information Administration. Based on the standards, each producer and importer of gasoline and diesel determine the minimum volume of renewable fuel that it must ensure is used in its transportation fuel.

The 2011 percentage standards for the four categories of fuel under EPA’s renewable fuel standard program, known as RFS2, include 800 million gallons of biomass-based diesel, of which biodiesel is the only fuel available in commercial quantities that meets the definition. Cellulosic biofuel volume for 2011 is 6.6 million gallons, advanced biofuel is 1.35 million gallons, and renewable fuel is 13.95 billion gallons.

Amtrak’s Tallow-powered Train a “Best Invention”

Right up there with the iPad, lab-grown lungs, and Google’s driverless car, Amtrak’s Heartland Flyer – a daily passenger train service between Oklahoma City, OK, and Fort Worth, TX – was named one of Time magazine’s “50 Best Inventions of 2010,” not because a diesel-powered locomotive is something new, but one that runs on a 20 percent biodiesel blend (B20) produced from beef tallow certainly is. Amtrak was recognized for its step towards a greener, low-carbon future by using biodiesel made from rendered beef fat that “burns cleaner than plant biodiesel.”

Last spring, Amtrak received a $274,000 grant from the Federal Railroad Administration to study the feasibility and effectiveness of using B20 in its Heartland Flyer locomotive. The project is in partnership with the Oklahoma Department of Transportation with state support from both Oklahoma and Texas. The biodiesel supplier is Direct Fuels of Euless, TX, which uses tallow from Texas beef processors as its feedstock.

The Heartland Flyer will operate exclusively on B20 for approximately 12 months. Amtrak will take detailed measurements on the General Electric P32-8 locomotive at the end of the year-long project to determine biodiesel’s impact on valves and gaskets. The company will also collect locomotive exhaust emissions data for analysis in accordance with U.S. Environmental Protection Agency test protocols. Previously conducted stationary locomotive engine testing showed a B20 blend reduced hydrocarbons and carbon monoxide each by 10 percent, cut particulates by 15 percent, and reduced sulfates by 20 percent.

China Exempts Biodiesel Taxes

China has exempted consumption taxes on biodiesel made from animal fats or vegetables oils, according to a Ministry of Finance and State Administration of Taxation announcement in news reports. The new policy is retroactively effective from January 1, 2009. Taxes already paid will be refunded.

The move is aimed at boosting the renewable resources sector, easing demand for petroleum, and protecting the ecological environment, and will save biodiesel producers about $135 per ton. The announcement also said this action will help guard against waste edible oils being reused for human consumption so to ensure food safety.
Darling, Valero Proposed Project Receives Loan Guarantee

A proposed renewable diesel project between Darling International, Inc., and Valero Energy Corporation has received a $241 million loan guarantee from the U.S. Department of Energy (DOE). The DOE conditional commitment offer to Diamond Green Diesel, LLC, the proposed joint venture between Darling and Valero, will support the construction of a 137 million gallon per year renewable diesel facility in Norco, LA, about 20 miles west of New Orleans. Valero Energy plans to direct the design, construction, and operation of the project and market all of its output, while Darling International will supply the feedstock, primarily animal fats and used cooking oil, to the facility, which will be adjacent to Valero’s St. Charles refinery near Norco.

The project is estimated to create 700 jobs during peak construction and over 60 jobs during operation. The facility is expected to nearly triple the amount of renewable diesel produced in the United States. In addition, the plant will fulfill almost 14 percent of a national mandate to boost production for biomass-based diesel.

Commencement of the project is contingent, among other things, on the execution by all parties of a definitive loan guarantee agreement, an acceptable final cost estimate for construction of the facility, and the final approval of Darling’s and Valero’s respective boards of directors.

Millions for Biofuels Producers

The U.S. Department of Agriculture (USDA) announced millions of dollars in investments in 33 states to support the production and usage of advanced biofuels. The payments are authorized under the Farm Bill’s Section 9005, the Bioenergy Program for Advanced Biofuels, and are based on the amount of advanced biofuels a recipient produces from renewable biomass, other than corn kernel starch. Eligible examples include biofuels derived from cellulose, crop residue, animal fats, vegetable oil, biogas (landfill and sewage waste treatment gas), and animal, food, and yard waste material.

The producer payments are intended to provide a financial incentive to biorefinery, a step USDA said is necessary towards meeting the nation’s renewable energy needs.

Many of the recipients produce biodiesel, including:
- Central Iowa Energy, LLC, Iowa, $80,571
- FUMPA Biofuels, Minnesota, $18,191
- Greenlight Biofuels, LLC, Alabama, $13,211
- Griffin Industries, Inc., Kentucky, $12,186
- High Plains Bioenergy, LLC, Oklahoma, $232,360
- Imperial Western Products, Inc., California, $38,865
- Lake Erie Biofuels, LLC, doing business as Hero BX, Pennsylvania, $275,742
- Minnesota Soybean Processors, Minnesota, $398,974
- Nova Biosource Fuels, Inc., Illinois, $169,084
- Renewable Energy Group, Inc., Iowa, $695,014
- Western Dubuque Biodiesel, LLC, Iowa, $178,926
- Western Iowa Energy, Iowa, $210,509

Complete list of recipients is available on the USDA Web site at www.usda.gov.

Minnesota Offers Scholarship

The American Lung Association in Minnesota and the Minnesota Soybean Growers Association will award a $1,000 scholarship to a high school senior who submits a winning essay touting the benefits of biodiesel. This is the fifth year for the Minnesota Clean Air Choice Scholarship essay contest, which helps raise awareness of biodiesel in the state. The contest is open to all high school seniors in Minnesota who are continuing their education after high school. The second place essay will receive a $500 scholarship.

In 2005, Minnesota became the first state to require nearly all diesel fuel sold to contain a two percent biodiesel blend. This requirement has now increased to five percent, and will increase to 10 percent in 2012 and 20 percent in 2015. Essay topics can be of the writer’s choosing, or discuss biodiesel’s benefits to Minnesota, the opportunities and challenges to expanding biodiesel’s use, or how the student can impact biodiesel use in their area.

Essay entries are due by March 30, 2011, to the American Lung Association in Minnesota.

REG Awarded

Biofuels Digest, a daily newsletter covering the biofuels industry, has named Renewable Energy Group (REG) as the “Commercial-Scale Technology of the Year” in its 2010 Biofuels Digest Award winners. The awards, first established in 2008, recognize excellence in the research, development, and commercialization of biofuels, renewable chemicals, and bio-based products. REG was one of 28 winners from around the world, which are chosen by the Biofuels Digest editorial board based on nominations submitted by the readership.

According to Biofuels Digest, REG was honored for its “novel continuous-flow, multi-feedstock processing technology that has allowed the company to pioneer the acquisition of a wide variety of hard-to-process, low-cost feedstocks such as tallow and yellow grease.”

Other winners included Neste Oil as “Project of the Year” for the completion and start-up of its 240 million gallon renewable diesel plant in Singapore.

Schools Keen on Making Biodiesel

More than 50 university and public school systems in the United States now own and operate Springboard Biodiesel’s BioPro biodiesel processor in an effort to save money and reduce their carbon footprint. Arkansas State University topped the list when it purchased the fully-automated machine that converts 50 gallons of vegetable oil or animal fats into ASTM International-grade biodiesel for approximately 95 cents a gallon.

Dr. Kevin Humphrey, director for Agricultural Education at Arkansas State University, first saw the BioPro in use at Truman State University in Missouri and plans to use his school’s equipment to convert crop oils, some of which will be grown at the university’s farm, as well as cooking oils collected from the college cafeterias to produce biodiesel. The plan is to use the finished fuel in diesel irrigation motors, tractors, and on-campus utility trucks.
Influencing the Influencers

“The saying, ‘What a difference a year makes’ couldn’t be any truer than now as we begin a new year. Since a year ago, we have seen dramatic changes both politically and economically.

“It is difficult to look into the crystal ball and predict the future with any assurances. It will be a challenging year for the National Renderers Association (NRA), as it will be for its member companies. But I am regularly reminded that with challenges come opportunities.”

This is how I started this column two years ago following the outcome of the 2008 presidential elections. My feelings are the same after the recent 2010 mid-term elections.

It has been a rollercoaster ride the last two years. The United States has seen “Obamacare,” financial reform, a major overhaul in U.S. food safety laws, and a tax extenders bill, all that might have a direct or indirect impact on the rendering industry. Not addressed was cap and trade, card check, any free trade agreements, or a settlement of the Mexican trucking dispute. These too would have had an impact on the rendering industry.

There won’t be much cap and trade or card check legislation coming from the new 112th Congress; however, the climate has improved to see some pending free trade agreements approved. President Barack Obama has also moved toward resolving the Mexican trucking dispute, probably against union wishes.

The emphasis with this new session of Congress will be to cut spending. Just about every candidate in the last election ran on some kind of platform that would reduce the U.S. deficit by cutting spending. This is an easier campaign slogan than it is an actual deed.

There are 112 new members in the House of Representatives and Senate of the new 112th Congress. This large turnover will cause some things to move more slowly than normal at the beginning. Many of the new representatives are truly novices and will have a steeper learning curve than others.

When I think of this new Congress, I think of the NRA annual fly-in. Its importance has been emphasized every year, and its significance will be no different this year. The fly-in has always given the rendering industry an excellent opportunity to tell its story. We have experienced many successes with these congressional visits. But the industry needs to expand its audience. This is not a new idea, just one that has to be revisited. The challenge is how do renderers get their story out to the right audiences with limited resources.

At the recent NRA convention, members expressed the need to tell the industry’s story, partly because renderers have a positive story to tell and should start getting credit for the good they do.

For lack of a better term, for now we’ll call it a render awareness program. The rendering industry has been called the “invisible industry,” the “original recyclers,” and, most recently, the “essential industry.” One thing is for sure, the industry is no longer invisible. However, renderers are still the original recyclers and essential.

Remember the song, “I Was Country When Country Wasn’t Cool”? Well, renderers were sustainable when being sustainable wasn’t cool. We need to get that story out and to an audience that is more than just politicians.

Some industries are just beginning to tout their sustainability credentials while politicians and others create incentives for these newcomers to the table. What about industries like rendering that have already been following practices that are now considered sustainable? Shouldn’t renderers get credit for what they are already doing?

The NRA members have decided to form a taskforce to develop a render awareness program. The first task will be to develop a message. We will then further identify and refine the audiences needing to be reached, which will likely include policymakers, customers, media, educators, allied organizations, and others yet to be determined. These groups are the influencers. Our goal will be to “influence the influencers.”

With a clear message and a plan, we will then target the appropriate audiences. Resources are limited and we will need to make sure we get the biggest bang for the buck.

Much can and will be done at the national level. However, the work NRA member renderers do at the local level in their own communities is equally as important. In the late 1990s, the NRA organized a series of regional community relations workshops that were very successful in assisting members to develop their programs at the local level.

I can’t predict what the awareness taskforce will recommend, however, we hope to have some ideas and recommendations to take to the membership at NRA’s annual spring meeting in Toronto, Canada, in early May. Feel free to contact me if you have any ideas or suggestions.

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billion in 2011; cities have expanded into what was once rural farmland; technology has evolved to the point that news is instantaneously delivered to the palm of one’s hand; a prion changed the way renderers do business and their products are perceived; and the rendering industry is now a global community where rules and regulations in one country can affect those a half a world away.

Some of the faces at Render have changed over the past 40 years. Burnham retired in 1996, passing the reins of leadership to the then associate editor, myself, his granddaughter, in fine rendering family tradition. And while the look of the magazine has undergone a few facelifts to ensure a refreshing appearance with the passing of years, the mission of “The International Magazine of Rendering” remains the same as it did 40 years ago: to promote the exchange of ideas and information between all facets of the rendering and associated industries.

As Render begins its fifth decade in print, we will continue to address the challenges and opportunities the industry will endure as it faces its own evolution. Render will also continue to promote the environmental advantages the global rendering industry provides to the community and the livestock industries. But more importantly, Render will continue to instill the passion the rendering industry has for its processes, its livelihood, and its contribution as the most “essential” and “greenest” industry!

We hope you join us for the next 40 years!

Feed Rule Compliance Excellent

A report released in January shows compliance with the Food and Drug Administration’s (FDA’s) ruminant feed ban to be excellent.

As of January 8, 2011, FDA had received over 83,000 inspection reports since 1997, with 73 percent conducted by state feed control officials and the remainder by FDA officials. None of the over 9,200 firms handling prohibited mammalian protein products failed a recent inspection, which include renderers, feed mills, and protein blenders. FDA’s Center for Veterinary Medicine has summarized the results of ruminant feed rule inspections as of January 8, 2011, which is available at www.fda.gov/AnimalVeterinary/NewsEvents/CVMUpdates/ucm239959.htm.

To help prevent the establishment and amplification of bovine spongiform encephalopathy (BSE) through feed in the United States, FDA implemented a final rule that prohibits the use of most mammalian protein in feeds for ruminant animals. This rule, Title 21, Part 589.2000 of the Code of Federal Regulations (CFR), referred to as the ruminant feed ban, became effective on August 4, 1997.

A second rule, Title 21, Part 589.2001 of the CFR, called the enhanced feed ban, became effective on April 27, 2009. This rule prohibits the use of certain cattle-derived materials in all animal feed. The BSE inspection report form has been revised and is being used for determining compliance with both the ruminant feed ban and the enhanced feed ban. R
Does the Future Hold Difficulty or Opportunity?

Winston Churchill said that, “A pessimist sees the difficulty in every opportunity; an optimist sees the opportunity in every difficulty.” This is particularly appropriate for the rendering industry.

Since the establishment of the World Renderers Organization (WRO) a decade ago, there have been few periods when the rendering industry has not been confronted with difficulties. In fact, the biggest difficulty the industry ever faced led to the formation of the WRO in the first place.

Bovine spongiform encephalopathy (BSE), and the many complications it created, was the reason for the establishment of the WRO, providing the international rendering community a collective voice when confronted with major issues. Even today, BSE still presents huge challenges in some countries, particularly in Europe, Canada, the United States, and several other countries that have experienced the disease.

But science, technology, much hard work, and the strict adherence to sound protocols have reduced the initial consequences of BSE, and indeed all transmissible spongiform encephalopathies. The rendering industry seems to be in a manageable situation at present, but needs to heed the lessons learned and adhere strictly to the established protocols.

When perception drives the public mind, no science or technology can overcome a frequently repeated negative 15 second sound bite. Let’s have no more undesirable sound bites as we maximize the use of rendered products for the good of humanity (and renderers) in the years ahead. It is encouraging to see the European Fat Processors and Renderers Association working in this area.

After a long period of animal protein meals from many countries being unacceptable in any animal diets, especially in the European Union, it now seems possible that the careful reintroduction of some meals of animal origin – specifically, chicken, feather, and porcine – may take place. Ultimately, the WRO may target the reintroduction of ruminant meals from BSE countries into appropriate diets for some animal species under careful guidance from qualified experts and with great prudence from responsible renderers.

Since BSE, the rendering industry, like many others, has been burdened by an excess of regulations introduced by a battalion of bureaucrats who seem to regulate for regulation’s sake. Don’t get me wrong: the WRO supports sensible, science-based regulation that enhances the goal of making rendered products safer for consumers. Recent European moves towards simplification are overdue. As animal feed products get closer to human food items, greater regulation is inevitable. We can work with this.

But like many industries, the rendering industry is much better at reacting to what has happened than preparing for what is likely to happen.

So let’s look to the future. At two recent conferences I attended, the Global Aquaculture Alliance conference in Kuala Lumpur, Malaysia, and the National Renderers Association (NRA) conference in Naples, FL, there was a recurring theme relating to the future of the rendering industry. World Bank experts and speakers from other eminent bodies have all said the following.

- **A new middle class is emerging (predominantly in Asia), with more people having greater disposable income and a desire for better nutrition.**

During the past two decades, over one billion people in China, India, and other developing countries have achieved Western middle class levels of income and meat consumption. This has a direct influence on demand for suitable feed ingredients. China’s growth is understood, but India is likely to grow even faster than China over the next decade.

- **The global population will increase to nine billion people by 2050.**

There are some possibilities for future agricultural expansion to meet the needs of a larger population. Brazil, Russia, India, and China all theoretically have suitable land available, together with reliable water supplies.

The Association of Southeast Asian Nations, or ASEAN, countries in Southeast Asia also have the potential to have a huge impact. Indonesia already has a vast aquaculture industry. Poultry production and consumption are expected to increase at a rapid rate, although religious and political influences will limit expansion opportunities for red meat and pigs. Vietnam, though much smaller, already has a voracious appetite for red meat. Farming is transitioning from the backyard to an industrial scale, and feed that has traditionally been farmyard scraps and household waste is moving to manufactured feed. This will create a greater need for protein ingredients.

Meanwhile, red meat production is nowhere nearly as efficient as poultry and aquaculture in converting protein into human foodstuffs. Indeed, as oceans continue to be depleted, aquaculture has now surpassed the wild fish catch in terms of tonnages produced.

The reality is that in most of the above countries, rapid population escalation is reducing the availability of both land and water for agricultural purposes.

- **Sustainability has become hugely important.**

Until about the year 2000, there seemed to be an abundant supply of arable land, water, fossil fuels, and fertilizer. Since then it has become obvious that the above resources are much more limited than first thought. As the global population increases and the middle class demand for high protein food rises, finite resources are likely to come...
under even more pressure.

According to Rabobank figures, in 1960 there was 0.45 hectare of food production land available for each person on the planet. Today this has fallen to 0.23 hectare, and it is forecast to drop to 0.18 by 2050.

Agriculture currently uses three-fourths of the earth’s fresh water. In 40 years, twice the food that is now produced will be needed, but there will not be twice the land or twice the water. We therefore need to learn how to sustainably exploit limited resources – the current use of protein meals from rendering is a classic example of opportunities not being utilized for maximum benefit.

**The perception of climate change is influencing decisions.**

It has been easy and convenient to blame climate change for a whole range of problems, most notably depletion of the rain forests and drought-driven crop failures. This is unfair. The more significant factor is probably that demand growth has rapidly outpaced international productivity increases. Thus a drought today has much more severe consequences than one in the 1980s of equal severity because of the much greater international demand for agricultural commodities and the much lower stored stocks of these commodities.

Nonetheless, in terms of future decision-making perception, it is effectively reality.

Research organizations in many countries are grappling with the above issues and huge advances have been made in animal nutrition, crop selection and production, and in turning waste into useful energy. Unfortunately, it seems that the population explosion is outpacing the best scientific efforts.

The rendering industry must continue to support the efforts of the team at the Fats and Proteins Research Foundation who work for all renderers.

Traditional farming in the developed world will probably come under increasing pressure as the economics of this activity become hard to sustain. It is easier and much cheaper to produce food from poultry and aquaculture than from farm-raised pigs, beef, sheep, and goats. We are fortunate that in several of the developing countries there is a desire to expand consumption of pigs and beef, representing continued hope for those industries that have been the backbone of many countries’ agricultural endeavours for generations.

As renderers, how can we best meet the likely challenges of the future? There is no single revolutionary change enabling the industry to dramatically increase its output, but I do see continual incremental improvements as possible and recommend that focus be put on the following: waste minimization; energy efficiency; adding value to what is already produced; and diversifying some products into more appropriate outputs.

The rendering industry has an important role to play as it heads into the future. It is time to promote this, but to get the greatest benefits, it is critical that all industry participants comply with existing regulations relating to the use of meals from ruminant proteins in animal diets.

National bodies, regional organizations, and the WRO itself are working to maximize the safe use of rendered products. Years of hard work can be undone at the stroke of a pen if someone is irresponsible enough to think they can make a quick buck by sliding non-complying product into a market where surveillance is lax and a buyer is just as irresponsible. The last thing we need is some rogue producer, marketer, or feed miller undoing the hard work that has been done. The future holds great opportunities for rendered products if we are patient and sensible.

Become involved in your national rendering organization, and encourage others to do likewise. The WRO has completed the initial establishment stages of its organization and now needs regular input to ensure that we travel in a direction that matches everyone’s best interests.

Here is my challenge to you: help us create a strategy and road map for WRO to follow. This should enable rendered products to make the most worthwhile contribution possible in the years to come. Bruce Ross and Kent Swisher of the NRA have already put time into the preparation of a discussion document that the WRO committee will use as a blueprint for the WRO’s direction in the future.

The volume of material the global rendering industry is able to contribute to the international protein pool is vastly greater than is currently being used, and our contribution to a hungry world can be very significant. Do you see the difficulty in this opportunity, or the vast opportunity in this difficulty? I’m optimistic that our industry can fulfill the high expectations I have for it – you should be too.

Now get up and do something about it!
Approaching Physical Plant Security

“Effective security precautions require a continuous and conscious awareness of one’s environment as well as the need to exercise prudence, judgment, and common sense.”
– Former Secretary of State Warren Christopher, 1994

“It’s never going to happen here.”
“There is nothing worth taking.”
“We’ve never had any problems before.”

It often seems like these statements are followed by an event that leaves one managing the loss, repairing the damage, or, worse yet, answering how “this” could have happened in such a quiet community. The list of excuses for avoiding assessing a company’s security posture is long, but a single event can easily change one’s mind.

Approaching physical security can often seem to be a daunting task. However, once broken down into easily manageable elements, the process can be an easy one. By following a simple process of conducting a security survey to identify vulnerabilities, examining security-related regulations, and understanding a time-tested concept for designing solutions, you’ll be able to set a solid foundation for protecting your facility, equipment, and employees.

Conducting a Survey

The cornerstone of determining a facility’s needs is to understand its site. You must have an acute awareness of not only the physical layout, but also how employees act within that environment.

Assessing physical security requires understanding how to identify a facility’s “zones of protection.” In Chart 1, Zone 1 is the outer most perimeter and may be the facility’s property line, void of any fence or other natural barrier. Zone 2 may be described as the general grounds or the parking lot. It is inside the facility’s perimeter but not necessarily controlled beyond a single checkpoint or fence line.

Zone 3 can be described as the interior controlled areas. A facility’s docks, employee cafeteria, and entrance vestibule for visitors are all areas designed exclusively for employee use or by visitors with physical controls or appropriate signage. Zone 4 is the most critical area and would include laboratories, food-grade holding tanks, end-product storage areas where quality is vital, and control rooms. Mapping this out for a particular facility provides a great deal of information and can form the building blocks for a security assessment.

Getting started means assembling the right team; physical security planning should not be undertaken in isolation. Even security professionals seek assistance to conduct valid assessments. Assign responsibilities to each member of the team, even if few in number. Even with two, one person can document the condition of the perimeter doors, grounds, or lighting while another may look solely at any areas deemed critical to the operation and cover the interior.

Once the site is divided into manageable areas, have team members walk through the site very carefully. I always teach newcomers to walk from the outside in and then inside out. Simply stated, you cannot assess the barrier or physical controls from only one side. A pedestrian door may appear to be secured from the interior while the exterior examination reveals framing that is so rotted even moderate pressure will crack the entrance wide open. While assessing the exterior facility and grounds ask these questions:

• Can we define our property line? Can others?
• Does the property appear to be well-maintained?
• Are entrances controlled?
• Are visitors to the site directed to the proper entrance for handling via appropriate signage or physical controls?
• Are there any monitoring devices in place such as a burglar alarm or closed-circuit television (CCTV) system?
If so, are they in working order and do they provide the information needed?

The list of questions to address can be daunting. Comprehensive tools and templates are readily available and include everything from lighting and alarm systems to door construction.

Chart 1. Identify Your Zones

Your Facility’s Requirements

Gone are the days when a manager solely oversees their own operation. In today’s world, security guidance documents and even regulations have been created, re-tooled, updated, and communicated by dozens of organizations. Oversight may take many forms including government regulators, customer compliance audits, or even within your organization. A sampling of those organizations includes:

• government agencies – Food and Drug Administration, U.S. Department of Agriculture, Department of Transportation, Department of Homeland Security, Occupational Safety and Health Administration, Department of Labor, and the Environmental Protection Agency;
• private associations – National Chicken Council, National Grain and Feed Association, National Turkey Federation, Grocery Manufacturers Association, and National Fire Protection Association. Another far-reaching organization that is setting the pace for creating security standards is the
ASIS (American Society for Industrial Security) International;

- internally – many rendering operations maintain internally published security requirements.

The answer for maintaining a best practice is not a simple one. Over time, major organizations will develop an extensive matrix that details each requirement and the corresponding control. Although these internally developed lists are usually comprehensive, all involved should develop and maintain an understanding of the industry and regulatory requirements.

**Appropriate Solutions**

Most security professionals follow a very simple concept for determining the most appropriate security solution: deter, detect, and delay.

- Deter – the prevention of an event through an obvious fear of consequences. Presenting an image of a well-protected facility provides the perception to an intruder that they’ll be challenged, caught, and ultimately unsuccessful. They’ll likely move on to a more friendly target.

- Detect – the actual determination that an act is occurring. Ideally this will happen as early as possible. Technology can play a big part through an integrated CCTV system or burglar alarm. Surprisingly though, detecting suspicious activity is often the result of an alert employee. Nothing pays dividends more than training your employees to be your eyes and ears.

- Delay – the ability to restrict the movement and progress of an intruder. A well-maintained fence, the appropriate use of locking handsets, and even the well-placed natural barriers such as a row of thick, thorny bushes not only make it undesirable for an intruder, they increase the chances the intruder will be observed and permit time for a response.

As responsible employees, we’re all tasked to provide the best return on our investment. Beyond that challenge most rendering operations do not operate with a budget that permits large capital expenditures for fencing, gates, extensive CCTV systems, or security patrols. If you cannot afford a strong fence line and gated entrances, find the money to install “No Trespassing” signs as an alternative. Over time small investments still pay big dividends.

A time-tested solution that delivers a terrific return on investment is training employees to report suspicious behavior. Creating a “challenge culture” where each employee is dedicated to protecting the property through questioning suspicious activity and confronting unregistered visitors is an extremely powerful deterrent.

Approaching physical security without a plan usually results in a disjointed effort. Many sites this author has surveyed have spent tens of thousands of dollars on fencing and gates while the handsets on exterior doors have not been in working condition for years.

Creating a plan that involves conducting a valid security survey, understanding a facility’s requirements, and using the time-tested concept of deter, detect, and delay to spread solutions across the “zones of protection,” will strike the right balance for security in your organization.

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Antioxidants from Rendered Products Studied

Preventing oxidation of rendered fats and oils is an ongoing battle waged by rendering and animal feed ingredient companies. As customers continue to request “natural” products, mixed tocopherol use has increased. However, tocopherols can be expensive and their source is based outside of the rendering industry. Clemson University researchers Dr. Vladimir Reukov and Dr. Alexey Vertegel are studying ways to use components of rendered products to isolate potent antioxidants that would allow economical antioxidants for use within the industry as well as create a new marketable antioxidant product.

The researchers have isolated a potent antioxidant agent from poultry and bovine animal by-products. Reukov’s and Vertegel’s first research goal is to improve the procedures for isolation of this valuable agent so that it can be commercially feasible on a large scale. Their second goal is to study applications of the agent in animal feeds and other potential products such as paint, caulking, and other goods that are exposed to oxidation. Their third and final goal is to determine methods of increasing usable shelf life of the agent.

Vertegel is a native of Moscow, Russia, where he obtained both his master of science and PhD degrees in chemistry from Moscow State University. He continued his studies at the University of Missouri-Rolla and Rensselaer Polytechnic Institute in Troy, NY. He is currently an assistant professor in the Department of Bioengineering at Clemson University.

Reukov is also a native of Moscow, Russia, where he studied as a graduate student of Vertegel. He obtained his master of science in materials science and his PhD in chemistry from Moscow State University. He is currently a research assistant professor in the Department of Bioengineering at Clemson University. Reukov and Vertegel are the first researchers from the field of bioengineering to join endeavors at the Clemson University Animal Co-Products Research and Education Center (ACREC).

As the animal agriculture industries continually seek to produce high-quality products, the protection of rendered fats and oils has been a significant area of research. As important components in animal feeds, rendered fats and oils are degraded by lipid auto-oxidation processes that decrease the nutritive value of animal feeds made with these lipids. In addition, auto-oxidation can affect flavor, color, odor, and texture of lipids, which can affect palatability. Certain fatty acids such as linoleic and linolenic acid contain unsaturated carbon-carbon bonds that can be unstable and very susceptible to lipid auto-oxidation.

The rendering industry utilizes antioxidants to prevent this lipid degradation; however, choices for antioxidant products are limited and the animal feed industry has had to rely on sources outside of the industry to provide such antioxidants as ethoxyquin or mixed tocopherols, which are particularly costly and can be subject to price fluctuations.

Use of vitamin C and E or tocopherols is not only expensive but is not always highly effective in protecting fats. Reukov and Vertegel report that the agent they have isolated from animal by-products is “several thousand times more efficient in eliminating free radicals than conventional antioxidants such as vitamin C.” Natural antioxidant agents that, at the time, had been derived primarily from yeasts were widely studied and patented in the early 1970s. However, these agents did not achieve widespread use in the food and animal feed industries primarily due to the high price of their natural isolation sources.

Reukov and Vertegel have developed an inexpensive method for isolation of antioxidants from animal by-products. Poor stability of natural source antioxidant agents from yeasts was another problem that prevented their widespread industrial applications. However, the antioxidant agent derived from bovine and poultry by-products is more stable and Reukov and Vertegel believe it can be further stabilized using fatty acids to achieve an effective shelf life of three years or longer at room temperature.

In the last few decades, the search for antioxidants that could be marketed as “natural” has intensified as interest in substituting synthetic antioxidants with naturally-derived products has increased. In recent years, antioxidant protein hydrolysates and peptides have been discovered including some isolated by other ACREC researchers. In their search, Reukov and Vertegel noted that several herb-derived agents have been marketed as natural products for human dietary supplements. Using this inspiration, they began examining other potential sources for similar antioxidant agents.

A literature review of information revealed a key cellular antioxidant that is one of the most powerful antioxidants
known for neutralizing oxidative radicals and the researchers realized that it is contained in the animal by-products’ raw material stream. In the animal body, this agent is a key cellular antioxidant that works as part of an important system for protecting cells and tissues from free radical damage. This agent has excellent antioxidative properties since it is an effective free radical scavenger. On the cellular level, it out-competes damaging oxidation reactions, thus protecting the cell from oxidation toxicity.

The antioxidation reaction occurs quite rapidly in the cell to protect sensitive and critical cellular targets, such as lipids present in the cell membrane. Moreover, this antioxidant has the largest reaction rate with its substrate of any known antioxidant. This reaction is only limited by the frequency of collisions between the antioxidant and its substrate. The research team postulates that this agent could be used to inhibit oxidative deterioration of animal feeds and when fed to livestock and poultry, could possibly even protect resultant meat lipids from oxidation.

In their study, Reukov and Vertegel are working on methods of producing large quantities of the antioxidative agent from rendered products. In their research laboratories, they have produced a protein concentrate with high antioxidative activity from animal by-products. However, natural raw product degradation post-mortem can reduce yields of the valuable agent so Reukov and Vertegel are now working to improve recoverability. The team has used a commercially available assay kit with standards to assay the antioxidant activity. They examined finished animal protein meals but obtained fairly low antioxidant activity. However, their results indicate very consistent and excellent recovery of the antioxidant agent from raw materials.

The final activity of antioxidant extract from raw materials was in the range of 80 to 100 units per milliliter (U/mL) after concentration. In isolation studies using raw materials prior to concentration, the activity of the antioxidant extracted from samples donated by industry suppliers was 9.64 U/mL, which was considerably lower than the researchers expected. One possible reason for such low antioxidant recovery was thought to be due to blood coagulation during collection and transport of the samples. Blood clots can capture antioxidant-containing components and prevent efficient extraction from the cells.

In using fresh materials, the researchers isolated extremely high levels using their extraction technique. The antioxidant yield could therefore be increased if antioxidant isolation is performed on-site or if anticoagulants are added to raw materials during storage and transport. The researchers are currently developing an improved extraction protocol to produce concentrates with higher antioxidant activity.

The results obtained thus far are very promising and indicate great potential for commercially isolating one of the most potent antioxidants known from animal by-products.

Continued on page 33
Potential Pitfalls of OSHA Settlements

Editor’s Note – Mark A. Lies II is a partner with the Chicago, IL, law firm of Seyfarth Shaw, LLP. He specializes in occupational safety and health and related personal injury and employment law litigation.

Daniel R. Flynn is an associate with Seyfarth Shaw, focusing on occupational safety and health and environmental matters. Legal topics provide general information, not specific legal advice. Individual circumstances may limit or modify this information.

If your company has received citations from the Occupational Safety and Health Administration (OSHA), it may be tempting to accept the initial penalty reduction that the agency offers and settle the matter quickly at the informal conference. Accepted citations, however, can be the basis for subsequent “repeat” citations at any other of your company’s facilities nationwide, which can result in a penalty of $70,000 for each citation. Furthermore, depending on the jurisdiction in which you are located, accepted citations can be used against your company in subsequent civil litigation. This concern is heightened where citations result from an accident involving an independent contractor’s or subcontractor’s employee(s).

Therefore, before accepting any settlement offer, you should carefully evaluate the citations to ensure that they are factually and legally accurate and that no defenses exist. If you reach acceptable settlement terms with OSHA, you should ensure that the settlement agreement contains language that protects your company in any subsequent civil litigation.

This article discusses recent developments in the willingness of courts to allow evidence of OSHA citations to be admitted and considered in civil litigation, as well as the steps you can take to limit the admissibility of the underlying citations and settlement agreements with OSHA.

Recent Developments

In Doty v. Darwin Olson (No. 0-733/09-1852, Iowa Court of Appeals, December 8, 2010), the defendant, a homebuilder named Darwin Olson, hired the plaintiff, a plumber named Doty, as an independent contractor to perform work on new homes. While inspecting a home under construction to evaluate a bid for the plumbing work, Doty fell down a stairway shaft, seriously injuring his heel. He subsequently sued Olson, alleging that the homebuilder failed to take proper safety precautions at the worksite.

The Court of Appeals held that if Doty had been an employee of Olson, evidence of the Iowa OSHA citations would have constituted negligence per se.1 That is, the fact that Olson violated an OSHA requirement would have been all the evidence needed to establish Olson’s liability to Doty. However, because Doty was an independent contractor, the Iowa Court of Appeals held that Iowa OSHA citations constituted relevant evidence, though not conclusive proof, of negligence. Consequently, under the holding in Doty, a hastily settled OSHA citation could end up as evidence of negligence before a jury.

Iowa’s holding appears to be the emerging majority view across jurisdictions. Other jurisdictions that have recently held that OSHA citations constitute relevant evidence of negligence, though not negligence per se, as to a non-employee include Arizona, Colorado, Vermont, California, Connecticut, Georgia, Nebraska, New Jersey, North Carolina, Ohio, Oregon, and Pennsylvania.

While quickly settling an OSHA citation arising out of an accident may seem at the time to be the easiest way to put the matter behind you, making a hasty decision could result in unintended consequences and potential civil liability down the road. Not only can accepted citations form the basis for a future repeat OSHA citation, but accepted citations could be used against the company by the injured individual in a civil action for negligence. Therefore, the employer should only accept citations that are factually and legally accurate.

Further, if you reach agreeable settlement terms with OSHA, you should always request that the settlement agreement include an exculpatory clause that may result in the exclusion of the underlying citations and settlement agreement from a subsequent civil action. Frequently, such settlement agreements contain the following information:

“Except for these proceedings, and matters arising out of these proceedings, and any other subsequent OSHA proceedings between the parties, none of the foregoing agreements, statements, findings, and actions taken by respondent shall be deemed an admission by the respondent of the allegations contained within citations and notification of penalty and the complaint. The agreements, statements, findings, and actions taken herein are made for the purpose of compromising and settling this matter economically and amicably, and they shall not be used for any other purpose whatsoever, except as herein stated.”

It has been our experience that although OSHA will frequently comply with this request, OSHA will rarely include such a clause in its initial settlement agreement.

Note:
1. It should be noted that many state workers’ compensation laws bar an employee from recovering damages from his or her employer under a claim of negligence.
Landmark Food Safety Legislation Enacted

The most sweeping changes in Food and Drug Administration (FDA) oversight of American food safety in more than 70 years were enacted by Congress during the final days of 2010.

The Food Safety Modernization Act of 2010 was passed by Congress and sent to President Barack Obama, who signed it after returning from his holiday vacation at the beginning of the year. This bill is important to the feed and pet food industries, and an industry coalition was able to get several “firewalls” included to ensure human food regulations are not inappropriately applied to animal feed and pet foods.

Under new broad authority granted in the Performance Standards section, the Secretary of Health and Human Services and the FDA commissioner, when writing rules to implement new authority, “shall, where appropriate, differentiate between food for human consumption and food intended for consumption by animals other than humans.”

The new law carries several additional requirements for FDA to recognize sourcing and production practices unique to the feed industry, including the need to buy ingredients from elevators and others who commingle grains and oilseeds from several farms, and to ensure FDA can exempt the feed and pet food industries from certain regulations when appropriate.

Also in the law is new FDA authority to recognize and officially approve the use of third-party compliance, inspection, and testing organizations as part of compliance regimens. The National Renderers Association (NRA) is confident that the Rendering Code of Practice will be recognized as such a regimen.

The new law does not impose registration fees on companies as the House-passed bill authorized, another major victory for the agriculture/food industry coalition in which NRA participated. The law does authorize user fees to pay the government’s cost of a mandatory recall, facility re-inspections, export certification, and the voluntary importer inspection program.

The new law gives FDA first-time mandatory recall authority, but with administrative protections for regulated industry. The new law requires all companies currently registered under the Bioterrorism Act to re-register every other year with the agency and to develop written, risk-based food hazard control plans.

The feed industry coalition worked successfully to ensure current good manufacturing practices such as those in the Rendering Code of Practice recognized by FDA’s Center for Veterinary Medicine qualify as risk-based controls. The agency will have greater access to registered company records, the ability to trace back contaminations, a voluntary expedited import control program, and penalties are increased.

There is much more work ahead as many of the sections of the new law require rulemaking and compliance guide development by FDA.

The bill is expected to cost about $1.4 billion over the next five years, and includes funding for 2,000 new FDA inspectors. FDA regulates 80 percent of the nation’s food.
Preaching to the Choir

Editor’s Note – Render received the following article last November. We always welcome the viewpoints of others, especially from those looking at the rendering industry from the outside in.

A group of attendees at last October’s National Renderers Association (NRA) convention were riding the elevator at the Ritz-Carlton with a few non-renderers also staying at the hotel. Upon leaving the elevator, one man turned to those of us wearing the obligatory name tags and said, “Most people don’t know about your quiet industry, but you are doing good work.” Those of us affiliated with the NRA looked at each other and smiled because we instinctively knew that what he said was true. To be honest, we sincerely appreciated his remarks because they were not the typical remarks made to renderers.

As the evening’s festivities progressed, I couldn’t help but think about the man’s positive statement about the rendering business. Fast forward one day. While attending one of the convention’s spouse programs, the presenter, an artist who paints exotic animals on discarded palm fronds, asked those in attendance, “What exactly is rendering?” The participants mentioned tallow, biofuels, animal feeds, and fertilizers. Her reaction was great: “Oh, so you are recyclers like me!” I suddenly found myself pondering two very interesting reactions to rendering. That night, I couldn’t help but wonder if the industry is too quiet.

Prior to my husband’s employment with a rendering company, I was aware of the industry, but not at all educated about what renderers actually did with the products they collected. As it turns out, when my husband and I moved to our new home, we soon learned that we lived a stone’s throw from a rendering plant. One day, a young man from the plant paid me a visit. Actually, the young man was one of the owners of the rendering plant near my home. At first we talked about horses and our barn under construction. It was a very pleasant conversation.

I soon realized, however, that this pleasant young man needed to determine if I was friend or foe. So we talked more about horses, the area where we lived, and then the ultimate question of whether or not I had any issues with the rendering plant near my home. Truth be told, the rendering plant was never an issue. Perhaps years ago, this discussion might have been very different, but I recall well the education I received about rendering that day. I was mightily impressed to learn about the positive impact rendering has on the environment. A few questions were posed to me that day: “Do you think people understand the value of rendering?” and “What would happen if all that goes into a rendering plant would suddenly be diverted to a local landfill?” Good questions indeed.

Growing up, my father was an excavator. Much of my father’s work was in septic tank repair. Not a very glamorous business unless, of course, it is your septic tank being repaired. My dad always said that people appreciated him when he improved their quality of life. If you’ve ever been around a failing septic tank, you know exactly what he meant. The conversation I had with the rendering company owner closely paralleled what I was taught growing up. What my dad did was valuable. What renderers do is also indeed valuable. It isn’t an overstatement to say that if rendering goes away, there will be serious consequences to our environment.

People simply don’t understand the symbiotic relationship we all have with rendering. Rendering isn’t merely the disposal of ailing or dead livestock from local farms, yet that is what many still believe. Many, except that man in the elevator, seem oblivious to the service rendering provides. What had he learned that made him have such a positive view of the rendering industry? I wish I had asked him that night.

But the story of rendering is still unfolding. As interest in green technologies emerges, science and the general public cannot ignore the positive environmental impact of rendering. Talk about a green industry! As a spouse of someone in the rendering industry, I feel compelled to help the general public understand what it is that makes rendering so important. I feel a strong loyalty to the rendering industry because if they disappeared tomorrow, we would all suffer the repercussions – quality of life repercussions. Like the title of the article says, I realize that I am preaching to the choir. But what if I had a handy bumper sticker phrase or two that would help the populous understand what renderers provide? Some catchy little slogan that would educate without a deep scientific discussion on rendering could prove really helpful.

I tried to come up with a few, but soon realized that what is done at rendering plants isn’t bumper sticker material – Feathers R Us, We Recycle What’s Left, From Leftovers to Fertilizers, Nothing Goes to Waste, What Renderers Take Feed Companies Make, Grease is Good – they just weren’t working for me. Still, I think it would be great if everyone connected to rendering could explain the value of the business in similar terms. I like the term “Biological Recyclers” but it begs the question, what do you recycle? Maybe the answer just isn’t that glamorous, and I have found that a scientific discussion usually causes eyes to glaze over.

Perhaps the real story just might be the one that was explained to me in my driveway that day several years back: What happens if rendering goes away? What is the net result to our landfills, waterways, and to our environment? That is a very glamorous story. Give the public the raw (pun intended) statistics. Once the public is enlightened about the quality of life rendering maintains, then maybe, just maybe, the one slogan we can all agree upon should simply be “Hug a Renderer” because renderers are indeed doing good work. R

Jean Marie Vogler is the wife of Robert Vogler, Valley Proteins, Inc. Robert also serves as chairman of the NRA Environmental Committee.
In late 2010, pig and poultry feed in Germany was found to contain dioxins above the European legal limits due to feed manufacturer Harles and Jentzsch, of Uetersen, Germany, using mixed fatty acids intended for technical purposes in feeding fats. Harles and Jentzsch also produces fats for technical purposes, such as paper processing.

The mixed fatty acids were sourced from biodiesel manufacturer Petrotec's Emden, Germany, facility. The source for the dioxin contamination is not yet known. German authorities are currently conducting an investigation to determine how the contaminated fatty acids were mixed with the vegetable feed fat, since the fatty acids were not supposed to be used in the production of feed fat.

According to a report by the European Commission Health and Consumers Directorate-General, approximately 3,000 metric tons of feed fat was manufactured from 175 metric tons of mixed fatty acids and mixed into compound feed for laying hens, poultry, cattle, and pigs at a level of between two and 10 percent. Twenty-five compound feed manufacturers in several German states received the feed. There were no deliveries of feed fat to other member states and third countries.

The report stated that more than 1,000 farms had received suspect compound feed in several German states. German authorities identified these farms and, as a precaution, imposed restrictions on all farms.

Tests on eggs and poultry meat from these farms showed increased dioxin levels. In some cases, dioxin in eggs exceeded the maximum level permitted by European Union (EU) law up to four times, forcing German authorities to recall eggs from laying hen farms that were supplied with contaminated feed. In North Rhine Westphalia, 8,000 laying hens from an affected farm were culled and destroyed.

As of press time, reports were circulating that Germany’s meat safety authority confirmed samples of pork taken at a pig farm in Germany’s Lower Saxony region exceeded the permitted level of dioxin in meat fat. Nearly 150 animals from this farm had been slaughtered. Officials were tracing other animals from the affected farm, and from other farms supplied by the feed mill believed to have received the bulk of the contaminated fatty acids.

In response to this incident, the European Compound Feed Manufacturers’ Federation, or FEFAC, announced a “two pillar” action plan to tackle dioxin contamination risks linked to the feed fat supply chain. The plan includes development of a testing protocol for a structured dioxin monitoring plan of the feed fat supply chain at EU level by the end of January 2011. The second pillar would review the registration process for fat blending businesses under the EU Feed Hygiene Regulation (EC) No. 183/2005.

FEFAC President Patrick Vanden Avenne stated, “Although the German authorities consider fraud at the fat blending plant which mixed technical fats in feed fats as the most plausible road of the contamination, we, as customers, must take all necessary and effective action which can help prevent such incidents in the future. In our view, this would require a combination of an industry-own structured monitoring plan and specific legal requirements for the approval of fat blending plants, which currently only have to be registered under the EU Feed Hygiene Regulation.”

FEFAC had already requested in 2009, after an Irish dioxin contamination that occurred at a food waste recycling plant, that all premises having a separate “non-feed” related activity on the same site must be seen as high-risk plants and controlled accordingly.

The European compound feed industry has, for many years, implemented extensive, risk-based dioxin monitoring plans at member state level. FEFAC estimates that in total 25,000 samples are taken every year for dioxin and PCB testing, both at the feed material and compound feed level.
Don Tyson Passes Away

Don Tyson, former chairman and chief executive officer (CEO) of Tyson Foods, Inc., and son of founder John W. Tyson, passed away January 6, 2011, at the age of 80 after a brief illness.

The Tyson family moved to Springdale, AR, from Olathe, KS, in 1931 to enable John W. Tyson to develop his business of hauling produce from Northwest Arkansas to the larger markets in the Midwest. By the time Don Tyson was a teenager, his father had started hauling chickens to those same markets and became involved in other aspects of the poultry business.

After high school, Tyson attended the University of Arkansas in Fayetteville, studying business and agriculture, but left before graduating to join his father in the family business in 1952. He was awarded an Honorary Doctorate of Humane Letters degree by the University of Arkansas in May 2010.

Through most of the 1950s, Tyson worked with his father to grow the family business, then known as Tyson Feed and Hatchery, supplying feed and baby chicks to local poultry producers in Northwest Arkansas. In 1958, the company became “vertically integrated” by building its first chicken processing plant in Springdale, AR, with Don Tyson overseeing the construction and then becoming its first plant manager. The company soon began to grow by acquiring other area poultry operations, and then went public with its initial public offering of stock in 1963 under the name Tyson’s Foods, Inc., the company name until 1972 when it was changed to Tyson Foods, Inc. The company continued to grow through the 1970s and 1980s with Don Tyson leading a series of acquisitions including Val-Mac, Lane Poultry, and the 1989 purchase of Holly Farms, which more than doubled the size of the company and made it the largest poultry processor in the United States.

Don Tyson moved up progressively in the company leadership, being named president in 1966, and then becoming chairman and CEO in 1967 when his father and step-mother were both tragically killed in an automobile-train accident in Springdale, AR. He continued to serve in these positions until 1983 when long-time Tyson executive Leland Tollett was named president. In 1991 the company named Tollett president and CEO with Tyson remaining as chairman until 1995 when he officially “retired” and Tollett was named chairman and CEO. Tollett, along with another long-time company team member, Donald “Buddy” Wray, had worked alongside Don Tyson throughout these years growing and running the company.

In the late 1990s the company continued to grow, most notably with the acquisition of Hudson Foods in 1998. By this time, Don’s son, John Tyson, had succeeded Tollett as chairman of the board of the company and Don Tyson was named chairman emeritus. Don Tyson continued to provide guidance and support for the company’s leadership team, including Tyson’s 2001 acquisition of IBP, Inc., a purchase engineered by John Tyson. As a result of the acquisition, Tyson Foods, the largest poultry producer in the world, also became the largest beef processor and second largest pork processor, with annual revenues jumping from approximately $7.5 billion to more than $24 billion.

Don Tyson created and led the Tyson Family Foundation, which among other things provides scholarships for post secondary students from communities where Tyson Foods has operations. He has been a well-known philanthropist in Arkansas and elsewhere, supporting countless causes, primarily in the fields of education, conservation, and the arts.

Tyson is survived by his son, John, and three daughters, Carla, Cheryl, and Joslyn; his sister-in-law Barbara Tyson; and two grandchildren.

A public memorial service is being planned. Memorials may be made to The Billfish Foundation, The Mayo Clinic, and the Dale Bumpers College of Agriculture, Food, and Life Sciences at the University of Arkansas.
Tallow Spills into Houston Channel

A shore-based storage tank owned by Jacob Sterns and Sons, Houston, TX, was breached in early January, causing approximately 250,000 gallons of beef tallow to spill, according to the U.S. Coast Guard.

An estimated 15,000 gallons of tallow entered the Houston Ship Channel via a storm drain, causing roughly three-quarters of a mile of the most northern portion of the Houston Ship Channel to be closed. No inbound or outbound ship traffic was delayed and no refineries were impacted. Due to the nature of the product, the environmental impact is expected to be minimal, the U.S. Coast Guard stated. The clean-up was complete in four days and the cause of the incident is under investigation.

Noah’s Ark Pays Fine for Discharges

The Minnesota Pollution Control Agency and Noah’s Ark Processors, LLC, reached an agreement in mid-December that resolves alleged violations of water quality laws and rules at Noah’s Ark’s meat processing plant and animal hide storage building in Dawson, MN. The company agreed to pay a $20,000 civil penalty and complete a number of corrective actions.

An inspection August 25, 2009, documented blood-contaminated water and untreated manure discharging from the facility to the ground, and discharges of animal hide salting leachate discharging from the hide building. Noah’s Ark Processors has stopped the discharges and worked to recover contamination, applied for permits, and submitted reports on recovery work and plans to prevent future discharges.

Alleged violations include operating without appropriate industrial stormwater, wastewater, and industrial by-product permits, failure to notify the agency of the discharges and provide requested information, and lack of a stormwater pollution prevention plan.

NRA’s Meeker Appointed to Ag Committee

Dr. David Meeker, senior vice president of Scientific Services, National Renderers Association (NRA), has been appointed to the U.S. Department of Agriculture Secretary’s Advisory Committee on Animal Health. The committee advises the Secretary of Agriculture on actions related to prevention, surveillance, and control of animal diseases of national importance. In doing so, the committee considers the implications of public health, conservation of natural resources, and the stability of livestock economies. Meeker was one of 20 individuals appointed.

California Has New Ag Secretary

Karen Ross of Alexandria, VA, has been appointed secretary of the California Department of Food and Agriculture, subject to state Senate confirmation. She has served as chief of staff with the U.S. Department of Agriculture since 2010. Previously, Ross served as president of the California Association of Winegrape Growers from 1996 to 2009, and was the vice president of Government Relations for the Agricultural Council of California from 1989 to 1996. Ross served as a member of the California State Board of Food and Agriculture from 2001 to 2009.

New Australian Rendering Plant Online

Craig Mostyn Group has invested $10 million to upgrade its red meat rendering plant at its Talloman facility in Hazelmere, Western Australia, signaling its commitment to Western Australia’s meat industry. The new plant came online in December and tallow quality improved immediately.

“With collection material in the old high-temperature process, bleaches were from 0.5 to 2.5 red refined and bleached color,” said Andrew Bennett, divisional manager for Talloman. “The bleaches in the first three weeks in the new plant have been from 0.2 to 0.5 red.”

The low-temperature press dewatering system by Rendertech of New Zealand uses a Haarslev fine crusher and twin screw press, Bliss hammermills, three GEA Westfalia separators, and Rendertech driers, waste heat evaporators, and pre-cooker. The state-of-the-art facility will reduce gas usage by almost 40 percent, translating into annual fuel cost savings of more than $1 million. The new system also significantly improves wastewater quality as nutrients are recovered as saleable product. Other savings will be realized by the reduction in usage of chemicals and electricity in the wastewater treatment plant, and reduced carbon dioxide emissions.

The new plant will service the majority of the red meat industry in Western Australia, processing about 100,000 metric tons a year of abattoir and boning room material into meat and bone meal and tallow.

Headquartered in Western Australia, Craig Mostyn is an Australian family-owned business founded in 1923 that employs about 350 people. Although its main business is in service rendering and farming and processing pigs, the company is also a major exporter and importer of seafood, a marketer of food service products, a trader in protein, and an exporter of fresh fruit.
EPA Completes Framework for GHG Emissions Permitting

The U.S. Environmental Protection Agency (EPA) issued the final series of actions in late December 2010 that will ensure the largest industrial facilities can get Clean Air Act permits that cover greenhouse gas (GHG) emissions beginning in January 2011. These actions are part of EPA’s approach to GHG permitting outlined in the spring 2010 tailoring rule.

The first set of actions will give EPA authority to permit GHGs in seven states (Arizona, Arkansas, Florida, Idaho, Kansas, Oregon, and Wyoming) until the state or local agencies can revise their permitting regulations to cover these emissions. EPA is taking additional steps to disapprove part of Texas’ Clean Air Act permitting program and the agency will also issue GHG permits to facilities in the state. These actions will ensure that large industrial facilities will be able to receive permits for GHGs regardless of where they are located.

In the second set of actions, EPA issued final rules that will ensure there are no federal laws in place that require any state to issue a permit for GHG emissions below levels outlined in the tailoring rule.

EPA has worked closely with the states to ensure that the transition for GHG permitting is smooth. States are best suited to issue permits to sources of GHG emissions and have experience working with industrial facilities. EPA will continue to work with states to help develop, submit, and obtain approval of the necessary revisions to enable the affected states to issue air permits to GHG-emitting sources.

Beginning in January 2011, industries that are large emitters of GHGs, and are planning to build new facilities or make major modifications to existing ones, must obtain air permits and implement energy efficiency measures or, where available, cost-effective technology to reduce their GHGs emissions. This includes the nation’s largest GHG emitters, such as power plants, refineries, and cement production facilities. Emissions from small sources, such as farms and restaurants, are not covered by these GHG permitting requirements.

The first reports of GHG emissions are due March 31, 2011, using EPA’s electronic reporting system. Facilities are required to report if they have total installed capacity of 30 million British thermal units per hour or greater and emit 25,000 metric tons of carbon dioxide equivalent (CO₂e) or more annually from all stationary fuel combustion sources. CO₂e primarily includes carbon dioxide, methane, and nitrous oxide. Emissions from biofuels, including rendered fat, are excluded in calculating the 25,000 CO₂e reporting trigger.

The registration process had to be completed by January 30, 2011, for facilities that must report GHG emissions for 2010. For more information, go to www.epa.gov/climatechange/emissions/ghgrulemaking.html.

Pilgrim’s Pride, JBS Appoint New Leadership

William W. Lovette took the helm as president and chief executive officer (CEO) of Pilgrim’s Pride Corporation on January 3, 2011. He succeeds Don Jackson, who resigned from the company January 2, 2011, in order to assume the position of president and CEO of JBS USA, which is majority owner of Pilgrim’s. Lovette will report directly to Jackson, who will continue to serve on Pilgrim’s Pride’s Board of Directors. In his new role, Jackson will continue reporting to Wesley M. Batista, who will remain as chairman of Pilgrim’s and JBS USA Holdings, Inc.

Lovette brings more than 27 years of industry leadership experience to Pilgrim’s. Since 2008, he has served as president and chief operating officer of Case Foods, Inc. Before joining Case, Lovette spent 25 years with Tyson Foods, Inc., in various roles in senior management, including president of its International Business Unit, president of its Foodservice Business Unit, and senior group vice president of Poultry and Prepared Foods. While at Tyson Foods, he served on the boards of Tyson de Mexico, Cobb-Vantress, Inc., and EFS Network, Inc.

In other news, Pilgrim’s Pride has introduced a redesigned logo, packaging, and Web site as part of the company’s rebranding campaign. The company’s previous logo featuring the familiar Pilgrim hat has been replaced with a modern image of a chicken in red with “Pilgrim’s” written in blue beneath the bird.


Meat and Poultry Fact Book Released

The 2010 edition of the American Meat Institute’s Meat and Poultry Facts, the industry’s leading statistical book, is now available at www.meatami.com/ht/d/StoreMO.

The 39th edition contains the latest statistics on production, consumption, prices, imports, exports, employment, wages, and much more. The 54-page book was compiled by John Nalivka, president of Sterling Marketing, Inc.

Nalivka noted in his introduction that 2010 was much more positive than 2009 as the uncertainty of demand became less of a burden on the markets. He did point out, however, that while cattle producers realized gains in net returns, herd building has not been initiated as producers still face uncertainty in the market and regulatory environment as well as changing producer demographics.

Company news can be sent to Render magazine by e-mail at editors@rendermagazine.com, or by fax at (530) 644-8429.
February

American Meat Institute’s Annual Meat Conference
February 20-22, Dallas, TX
Log on to www.meatconference.com

U.S. Department of Agriculture Agricultural Outlook Forum 2011
February 24-25, Arlington, VA
Log on to www.usda.gov/oce/forum

Pacific Coast Renderers Association 79th Annual Convention
February 25-26, Carmel Valley, CA
E-mail Jeanette Caito at caitosf@mcn.org

Aquaculture America 2011
February 28-March 3, New Orleans, LA
Log on to www.was.org

March

13th Annual International Aboveground Storage Tank Conference and Trade Show
March 1-3, Orlando, FL
Log on to www.nistm.org

World Biofuels Markets
March 22-24, Rotterdam, the Netherlands
Log on to www.worldbiofuelsmarkets.com

Brazilian Expo Render and Pet Food Industry 2011
March 30-31, Sao Paulo, Brazil
Log on to www.editorastilo.com.br

April

Petfood Forum 2011
April 11-13, Schaumburg, IL
Log on to www.petfoodindustry.com

National Institute for Animal Agriculture Annual Meeting
April 11-14, San Antonio, TX.
Log on to www.animalagriculture.org

American Meat Institute’s International Meat, Poultry, and Seafood Industry Convention and Exposition
April 13-16, Chicago, IL
Log on to www.amiexpo.com

California Grain and Feed Association Annual Convention
April 14-17, Newport Beach, CA
Log on to www.cgfa.org

May

102nd American Oil Chemists’ Society Annual Meeting and Expo
May 1-4, Cincinnati, OH
Log on to http://annualmeeting.aocs.org

National Renderers Association Spring Meeting
May 3-5, Toronto, ON, Canada
Log on to http://nationalrenderers.org

June

World Aquaculture 2011
June 6-10, Natal, Brazil
Log on to www.was.org

National Renderers Association Central Region Meeting
June 8-10, Elkhart Lake, WI
E-mail George Kaluzny at goynzulak@aol.com, or Mike Owens at mike@krugerinc.com

World Pork Expo
June 8-10, Des Moines, IA
Log on to www.worldpork.org

European Fat Processors and Renderers Association Congress
June 8-11, Dublin, Ireland
Log on to www.efpradublin2011.com

July

Australian Renderers Association Symposium
July 28-29, Sydney, Australia
Log on to www.ausrenderers.com.au, or E-mail Graeme Banks at gsbanks@ozemail.com.au

Have an upcoming event or meeting? Send event date, name, location, and registration contact information to Render, 2820 Birch Avenue, Camino, CA 95709, fax (530) 644-8429, or e-mail editors@rendermagazine.com.

Complete updated calendar available at www.rendermagazine.com
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