Heed the Call: Congress, Extend Those Biodiesel Tax Credits!

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Palm Oil  
Jatropha Oil  
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Corn Oil  
Cotton Seed Oil  
Algae Oil  
Used Cooking Oil  
Yellow Grease  
Traps / Brown Grease  
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Contents

Features

10 Heed the Call:  
Congress, extend those biodiesel tax credits!

14 Studies Show  
Renewable fuels reduce greenhouse gases considerably.

21 Uproar Over EPA’s Finding  
That greenhouse gases endanger public health.

31 Europe Funds Animal Disease Programs

Departments

6 View from Washington  
It’s still the economy, Congress.

8 Newsline  
California leading the greenhouse gas reduction revolution.

16 Biofuels Bulletin  
New Mexico leaders take step in developing sustainable biofuels industry.

20 From the Association  
Working for the good of the industry.

22 International Report  
Canada invests in biodiesel research, British Columbia mandates blend.

24 ACREC Solutions  
Biodiesel synthesis from animal fats using solid catalysts.

26 Labor and the Law  
After the storm: disaster recovery and employee safety.

28 People, Places & ...

30 Mark Your Calendar

32 Classifieds
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There’s talk as I write this that President Barack Obama may shift the date of the State of the Union address from the third week in January to a date sometime after Congress passes health care reform legislation. His incentive would be so he can proudly look the American public in the eye and, like a child showing his parents a straight “A” report card, demonstrate he made good on his campaign promise. If Obama postpones the State of the Union, it will be only the second time a president has ever done so – the first being President Ronald Reagan, who waited a week after the Challenger space shuttle disaster.

There’s such an odd lack of priority within Congress and the administration as we enter the Obama administration’s second year in office. This Congress and this White House keep ricocheting from issue to issue with little or no explanation why on Monday jobs creation is the number one priority, but on Tuesday, it’s global warming or smog control or Afghanistan. While every poll and pundit continually hammers home the number one priority for the voting public is the economy and jobs – remember “It’s the economy, stupid” slogan during the 1992 presidential campaign – congressional leadership and the White House remain stuck on health care reform and its trillion dollar price tag.

And while the race to reinvent U.S. health care continues, other issues have fallen by the wayside. In some cases, this is a good thing, and in others, not so much.

One big disappointment as Congress rushed to leave for Christmas break was failure of the Senate to pass a federal tax extenders package so that literally thousands of federal tax breaks for business and individuals were allowed to expire, including the $1 per gallon blenders tax credit on all forms of biodiesel. Also allowed to lapse was the 50-cent per gallon alternative fuels mixture tax credit.

The House has passed its version of an extenders package, but the Senate, caught up in the rush to complete health care reform and trying against all odds to come up with some form of climate change legislation that would pass the laugh test, simply ran out of time and inclination. The Senate could have relatively easily taken the House package, tacked on its priorities, and through a series of informal discussions, blended the two bills so that research and development, bioenergy, child care, and various other tax breaks expiring December 31, 2009, would have been made whole at least for another year.

But the Senate also could not figure out how to fix the never-ending battle over revamping the federal estate tax, which, while it technically expired at the end of December, will automatically return on January 1, 2011, having reverted to its 2000 form, percentagess, and tax rates. Apparently, the Senate must do all tax-related issues in one package, so until the estate tax tug-of-war is resolved, the tax extenders package will languish.

Senator Charles Grassley (R-IA), ranking member of the Senate Finance Committee and the avenging white knight of all federal programs ethanol and biodiesel, said in mid-December that if allowed to expire, the absence of bioenergy tax breaks would mean the alternative energy industry would “grind to a halt.” The congressional pat on the head to those who make business decisions based on these tax breaks is essentially a “don’t worry; we’ll get around to it during the first quarter. Oh, and we’ll make it retroactive to January 1, so you won’t lose any money.”

This, in an era when the public’s trust in Congress is at an all-time low and bank credit is almost non-existent, just doesn’t feed the bulldog for a lot of businesses out there.

The Obama administration’s public statements about the importance of alternative energy and its support for the tax credits notwithstanding, the White House has been silent about the fate of the tax extenders package. Perhaps the powers that be simply assume, as Democrat leadership has said, that all will be made whole before March. Perhaps the issue lottery simply hasn’t bounced the bioenergy tax credit ball to the top of the game.

The good news is that as the nation slogs through what every overly excited meteorologist predicts will be the worst winter in 25 years – just this morning, the radio reported weather experts predicting the planet has entered a 30-year cooling phase – climate change/cap and trade legislation is for all intents and purposes, dead.

Even Secretary of Agriculture Tom Vilsack, Obama’s climate change acolyte in Copenhagen, Denmark, has retreated from his nearly blind support of the House-passed climate change bill. While he spent a good chunk of his hearing time in both the House and Senate promising farmers and ranchers they’d make out like bandits during the out years of the climate change scheme, when the U.S. Department of Agriculture’s own analysis demonstrated about 60 million acres of crop and pastureland would likely switch to “afforestation” – that’s what you and I call tree planting – he ordered his economists to sit down with the Environmental Protection Agency (EPA) to rework the economic models they used in predicting the cornucopia of benefits and federal checks predicted to ensue from the climate change bills. Why?

Because it dawned on someone that to take 60 million acres out of production – on top of arable cropland already locked up in the Conservation Reserve Program – means a serious challenge to U.S. farmers’ and ranchers’ ability to produce enough food to feed this country, maintain export markets, and meet industrial/fuel demand.

There doesn’t seem to be any gnashing of teeth or rending of garments at the other end of Pennsylvania Avenue over the fate of the much-touted climate
change/cap and trade bill in the Senate, likely because the media opportunity that was the December United Nations climate change summit in Copenhagen has passed. The United States was able to attend the meeting, relate our collective political epiphany over greenhouse gas emissions – that being the EPA “endangerment” finding and subsequent rulemaking in the absence of new law – stake claim to our new-found “global leadership” role in controlling said emissions, sign the essentially meaningless document that emerged from Copenhagen, and gear up for the next global “leadership” issue.

That EPA rulemaking, however, is causing serious administration worry as it was never supposed to be the silver bullet on global warming, but rather a political sword to hang over the collective head of the Senate to inspire quick action in that chamber to complete the climate change legislation.

Even climate change’s biggest Senate supporters say the EPA rulemaking to control greenhouse gas emissions is at best ill-advised. Said Senator Jeff Bingaman (D-NM), chair of the Senate Energy and Natural Resources Committee, as he recently reported climate change legislation won’t happen this year, “[the EPA rulemaking] just means everyone’s utility bill is going to go up.”

While the EPA bureaucrats in charge of writing the greenhouse gas rule scurry about, the EPA lawyers are packing their briefcases and getting ready to head over to the Department of Justice so the federal defense teams can begin their preparation for what’s predicted to be a flood of citizen lawsuits against the government over the incredible reach of a rulemaking that can only be described as enshrining a serious double standard over emissions regulation, with no clear legal authority for doing so in the first place.

All of this happened or didn’t happen during 2009, an “off year,” meaning there was no federal election – presidential or congressional – looming large for the entire House and one-third of the Senate. This fall’s election is shaping up to be a major game-changer, meaning if you figure the historic trend that the party in power loses seats during an off year, not only has the election prospect already begun the traditional process of sucking the backbone out of most of Congress, the reality has led to 12 retirement announcements in the Senate alone, evenly split between the Rs and the Ds. That means fully one-third of Senate seats up for grabs are open races. I think it’s fair to say Senate Majority Leader Harry Reid’s filibuster-proof 60-vote majority is history.

If you’re Democrat leadership in either the House or Senate, you’re scrambling to find some kind of economic Easter basket to hand voters come May or June, with a mid-to-late summer reinjection of federal largesse, in hopes whatever euphoria you create will last until November. You’re also crossing digits in hopes the special elections around the country to replace retired or expired members of Congress between now and November go your way, that nothing seriously ugly happens in any theater of war, that energy prices stabilize, and that voters lose their distaste for the cost of health care reform. In other words, you’re hoping the old political axiom about the voters having a short memory is true.

I’m guessing this November, that ain’t gonna happen.
California Leading the Greenhouse Gas Reduction Revolution

It has long been known that what California does legislatively can eventually have an impact on the rest of the country. This is appearing quite evident when it comes to standards aimed at reducing greenhouse gas (GHG) emissions.

In 2006, California enacted its Global Warming Solutions Act, tasking the California Air Resources Board (CARB) with various responsibilities toward reducing the state’s GHG emissions. One of the steps taken was the establishment of the Low Carbon Fuel Standard, which was issued on January 18, 2007, and calls for a reduction of at least 10 percent in the carbon intensity of California’s transportation fuels by 2020. Three years later, CARB has finalized a regulation to meet the standard, setting average carbon intensity requirements for petroleum and alternative fuels in order to reduce the state’s carbon emissions at least 10 percent by 2020. In 2010, regulated parties are only required to report, but by 2011, they must meet the carbon reduction requirements set forth in the regulation, beginning with 0.25 percent reduction the first year, with incremental increases each year until a 10 percent reduction is met in 2020.

Now other U.S. states and Canadian provinces are taking California’s lead or teaming up with the western state in an effort to reduce GHG emissions from transportation fuels and vehicles.

Eleven governors from Northeast and Mid-Atlantic states have signed a memorandum of understanding (MOU) committing to a regional effort to develop a comprehensive, regional low carbon fuel standard, a market-based, fuel-neutral program that would apply to the transportation sector, and potentially apply to fuels used for heating buildings. A low carbon fuel standard has the potential to reduce transportation-related GHG emissions, which represent approximately 30 percent of emissions in the Mid-Atlantic region; reduce regional vulnerability to petroleum price volatility; and facilitate the long-term transition from petroleum-based fuels in the transportation sector. The states signing onto the agreement include Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont.

Based on letters of intent signed in December 2008, the 11 states have already begun preliminary work toward designing a low carbon fuel standard. The MOU established a process to develop a regional framework by 2011 and examine the economic impacts of a standard program. Ten of the 11 states have already demonstrated the success of regional emissions reduction programs with their participation in the Regional Greenhouse Gas Initiative, a cap-and-trade scheme that covers GHG emissions from power plants. A regional program to address transportation and other fuels is considered prudent and efficient among the signatories given the interconnected nature of the fuel distribution system in the region.

Pennsylvania is already making strides in the production and use of lower-carbon fuels. Starting January 1, 2010, all diesel fuel sold in the state must contain at least two percent biodiesel, since in-state production capacity hit 40 million gallons a year at the end of 2008. Under a state law signed in July 2008, as Pennsylvania capacity to produce biodiesel grows, the required percentage of biodiesel in diesel fuel grows, reducing GHG emissions. The state has put other initiatives in place to further reduce Pennsylvania’s emissions by 36 percent. 

Dairy Producers to Work on Curbing GHG Emissions

While government agencies work at implementing programs to reduce greenhouse gas (GHG) emissions emitting from industry and transportation, the U.S. Department of Agriculture (USDA) and U.S. dairy producers have agreed to accelerate adoption of innovative manure-to-energy projects on American dairy farms to help curb GHGs.

U.S. Agriculture Secretary Tom Vilsack and the Innovation Center for U.S. Dairy, part of Dairy Management, Inc., signed a memorandum of understanding in mid-December that will have USDA and dairy producers working together to reach a 25 percent reduction in GHG emissions by the year 2020. USDA will do so by undertaking research initiatives, allowing implementation flexibility, and enhancing marketing efforts of anaerobic digesters to dairy producers.

Anaerobic digester technology is a proven method of converting waste products, such as manure, into electricity. The technology utilizes generators that are fueled by methane captured from the animal manure. Currently, only about two percent of U.S. dairies that are candidates for a profitable digester are utilizing the technology. Dairy operations with anaerobic digesters routinely generate enough electricity to power 200 homes.

Through the agreement, USDA and the Innovation Center for U.S. Dairy will increase the number of anaerobic digesters supported by USDA programs. Beyond promoting the digesters, the agreement will encourage research and development of new technologies to help dairies reduce GHG emissions.
Canada Joins the Revolt

Two Canadian provinces are also following California’s lead in reducing GHGs, although, at this time, only as it relates to vehicles emissions.

In Quebec, a regulation in respect to motor vehicle GHG emissions, whose standards are equivalent to those in California, went into effect in mid-January, making it the first Canadian province to apply North American standards. The law is an important step in meeting the goals of the province’s 2006-2012 Climate Change Action Plan, and is a determinant factor in reaching Quebec’s 2020 GHG emission reduction target as well.

In 2006, the transportation sector was the highest producer of Quebec’s GHG emissions, accounting for 40 percent of the total, with light vehicles responsible for half of these emissions. The regulation will apply to all 2010-2016 model-year cars and light trucks sold, leased, or marketed in the province. Automobile manufacturers will be required to ensure that for each of these model years, their average fleet GHG emissions do not exceed regulatory levels.

On the Western side of Canada, British Columbia and CARB signed an MOU in December that commits British Columbia’s Ministry of Environment and the board to move forward in partnership in the implementation of GHG emissions standards for new cars, sport utility vehicles, and light-duty trucks. Standards mirroring California’s are projected to reduce GHG emissions from light-duty vehicles in British Columbia by 30 percent in 2016, relative to current vehicles. Both parties will share information and resources to support consistent application of vehicle emissions standards to vehicle models available in California and British Columbia.

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It’s been a long time comin’,” as Crosby, Stills, and Nash crooned in the late 1960s, and biodiesel has been evolving for a long, long time. Render first enlightened readers on this alternative fuel in the October 1992 issue, reporting that “renderers could be in the automotive fuel business.” But as we head into a new decade, the question remains if renderers, and the biodiesel industry itself, will continue to be in the alternative fuel business.

Back in 1992, senior officials of the U.S. Department of Agriculture (USDA) and Environmental Protection Agency (EPA) indicated at a biodiesel pilot plant tour in Kansas City, MO, their “firm support of an active national effort to make biodiesel fuel a commercial reality.” Over the years, various government programs have provided grants, loans, and other incentives to encourage biodiesel production and its use in government and commercial fleets, and in the private sector. One such incentive has been the biodiesel tax credit, first passed by Congress in 2004 and since extended twice, most recently as part of the Emergency Economic Stabilization Act of 2008. Biodiesel produced from virgin feedstocks such as soybean oil and non-virgin feedstocks such as yellow grease and animal fats qualifies for a $1.00 per gallon excise tax credit. Many in the biodiesel industry acknowledge that the tax credit has played a critical role in propelling the U.S. biodiesel industry to commercial scale production. Since the credit was first allowed, annual biodiesel production has gone from 25 million gallons in 2004 to nearly 700 million gallons in 2008.

But the tax credit expired on December 31, 2009, despite valiant efforts by the biodiesel, rendering, and other industries to not let that happen. The credit extension was included in House of Representatives (H.R.) 4213, the Tax Extenders Act of 2009, as an 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. But the health care debate at the end of the year took the Senate’s attention away from other matters and thus the tax credits were allowed to expire.

So now what?

Continuing the Fight

Congress was due to return to Capitol Hill about the time this issue was wrapping up to go to press. When they do, the affected industries will continue to fight the battle of getting the tax credits extended until there is success. In early December, the National Biodiesel Board (NBB) sent a letter, economic impact report, and background paper to House Committee on Ways and Means Chairman Charles Rangel in support of H.R. 4213. In his letter, Manning Feraci, vice president of Federal Affairs at NBB, informed Rangel that the tax incentive is designed to make the biodiesel price competitive with
conventional diesel fuel, and is structured in a manner that allows the value of the incentive to be recognized immediately in the market price of biodiesel.

One of NBB’s pleas for the tax extension stems from the current global economic crisis that has hit the biodiesel industry hard. Established plants and those under construction have had difficulty accessing operating capital and obtaining loans to fund expansions or complete newly built plants. Volatility in commodity markets and reduced demand for biodiesel in both domestic and global markets have made it difficult for producers to sell fuel. Prohibitively high tariffs put in place early in 2009 by the European Union on U.S. biodiesel imports cut off a large export market, further bringing down the growing industry. And uncertainty in federal policy that Feraci states is vital to the industry’s survival, which includes the EPA’s delayed expanded renewable fuels standard, “is sending inconsistent signals to the marketplace and undermining investor confidence in the industry.” NBB estimates 29,000 jobs were lost in the biodiesel industry last year and production, at 475 million gallons, was 31 percent below the 691 gallons sold in 2008 due to these factors.

The National Association of Truck Stop Owners (NATSO) also urged Senate leaders to quickly extend the tax credit before it expired to ensure an affordable biodiesel supply for the nation’s 3.5 million truck drivers and to secure the environmental investments of the nation’s truck stops.

“Our members want to support green initiatives,” NATSO President and Chief Executive Officer Lisa Mullings said. “But they are concerned that if they make the investment in biodiesel fueling infrastructure and the tax credit isn’t renewed, they won’t be able to sell the biodiesel because of the price disparity between biodiesel and other fuels. We would like to see the tax credit extended so that fuel retailers will be able to make these investments.”

Despite the doom and gloom, industry representatives continue to ensure lawmakers are aware of biodiesel’s vast benefits economically, environmentally, and to the nation’s energy security. NBB reports that the U.S. biodiesel industry supported 23,000 jobs in all sectors of the economy in 2009, added $4.1 billion to the U.S. gross domestic product (GDP), and generated $445 million in tax revenue to the federal treasury and $383 million to state and local governments. As shown in Table 1, the biodiesel industry spent about $1.3 billion in raw materials, goods, and services to produce 475 million gallons of biodiesel that displaced 26.9 million barrels of petroleum with a clean-burning, efficient fuel.

Optimism remains high that when Congress returns, the tax credit will be extended when Congress returns and hopes congressional leaders will address the issue expeditiously so as to prevent any significant disruption in the market.

Some in Congress are trying to make it a priority. Prior to adjourning for the year, Senate Finance Committee Chairman Max Baucus and Ranking Member Chuck Grassley presented a colloquy about the importance of passing the tax incentive for the biodiesel industry. In the letter, Baucus said it is his intention that the Senate take up legislation to extend the tax credits as quickly as possible. Grassley added that the tax provisions should be made retroactively, pointing out that “support in Congress for extending the biodiesel tax credit is robust, bipartisan, and bicameral” and that it was not extended prior to January 1, 2010, solely due to issues unrelated to the merits of the biodiesel tax credit.

**RFS2 Due**

Another government program that has the biodiesel industry in limbo is EPA’s expanded renewable fuel standard, known as RFS2. In late May 2009, EPA released a proposed rule to outline its strategy for increasing the supply of renewable fuels, poised to reach 36 billion gallons by 2022, as mandated by the Energy Independence and Security Act of 2007. RFS2 requires the use of 500 million gallons of biomass-based diesel

**Table 1. Economic Contribution of the U.S. Biodiesel Industry, 2009 (million dollars)**

<table>
<thead>
<tr>
<th>Industry</th>
<th>Spending</th>
<th>GDP</th>
<th>Earnings</th>
<th>Number of Jobs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Operations</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feedstocks (soybean oil and other fats)</td>
<td>$1,106.2</td>
<td>$2,306.8</td>
<td>$818.0</td>
<td>19,686</td>
</tr>
<tr>
<td>Industrial chemicals</td>
<td>129.8</td>
<td>234.5</td>
<td>93.1</td>
<td>1,743</td>
</tr>
<tr>
<td>Electric, natural gas, water</td>
<td>35.6</td>
<td>52.8</td>
<td>22.8</td>
<td>410</td>
</tr>
<tr>
<td>Maintenance and repair</td>
<td>14.3</td>
<td>20.5</td>
<td>13.6</td>
<td>342</td>
</tr>
<tr>
<td>Business services</td>
<td>25.9</td>
<td>39.8</td>
<td>26.2</td>
<td>541</td>
</tr>
<tr>
<td>Transportation</td>
<td>2.1</td>
<td>3.5</td>
<td>1.8</td>
<td>42</td>
</tr>
<tr>
<td>Earnings paid to households</td>
<td>14.4</td>
<td>13.1</td>
<td>6.8</td>
<td>172</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>$1,328.3</strong></td>
<td><strong>$2,670.9</strong></td>
<td><strong>$982.3</strong></td>
<td><strong>22,935</strong></td>
</tr>
<tr>
<td>Plus Value of Biodiesel Output</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biodiesel</td>
<td>$1,434.5</td>
<td></td>
<td>$14.4</td>
<td></td>
</tr>
<tr>
<td>Co-products (glycerin)</td>
<td></td>
<td></td>
<td>12.8</td>
<td></td>
</tr>
<tr>
<td><strong>Total Impact</strong></td>
<td><strong>$4,118.3</strong></td>
<td><strong>$996.7</strong></td>
<td><strong>22,935</strong></td>
<td></td>
</tr>
</tbody>
</table>

Source: Urbanchuk, John M. 2009. Economic Impact of Eliminating the Biodiesel Tax Credit [report for NBB], p. 7

Continued on page 12
in 2009, increasing gradually to one billion gallons by 2012. From 2012 to 2022, a minimum of one billion gallons must be used domestically, with EPA having the authority to increase the minimum volume requirement.

Under the proposal, some renewable fuels must achieve greenhouse gas (GHG) reductions compared to the gasoline and diesel fuels they displace. The thresholds would be 20 percent less GHGs for renewable fuels produced from new facilities, 50 percent less for biomass-based diesel and advanced biofuels (i.e., biodiesel), and 60 percent less for cellulosic biofuels.

EPA has analyzed the life cycle GHG impacts of the range of biofuels currently expected to contribute significantly to meeting the volume mandates through 2022. According to the agency’s draft life cycle GHG emission reduction results, soy-based biodiesel, at a 22 percent discount rate, would not meet the 50 percent reduction threshold, while waste grease biodiesel, at an 80 percent discount, would. Animal fat was not listed in the draft results.

There were two comment periods on the RFS2 proposal, the second one concluding at the end of September 2009, giving the biodiesel industry opportunity to voice its concern over EPA’s draft life cycle analysis. NBB commented that EPA’s GHG methodology relied on outdated data that artificially penalizes U.S. biodiesel; EPA should not include international indirect land use change in its GHG emissions calculations; and excluding soy oil from biodiesel production will not allow the industry to meet the goals of the RFS2.

Word at press time was that EPA was expected to announce RFS2 rules by the end of January. But until the agency does release its rule and Congress extends the tax credits, the biodiesel industry is in a state of suspension and uncertainty. Multiple plants ceased production at the beginning of the year while others are processing only to meet current contracts. A few biodiesel producers are processing and selling as though the tax credit will be passed and made retroactive, while others are selling only 100 percent biodiesel. Renderers report that most biodiesel customers have ceased purchasing fats and oils for biodiesel production.

Extension of the tax credit is also imperative to the rendering industry, which has enjoyed the expansion of this new market. Over the past year, the biodiesel industry has continued to increase its usage of animal fats and recycled cooking oils as feedstocks. As reported in the December 2009 issue of Render, $350 million of rendered products were used by biodiesel producers in 2008. In 2009, that number is likely to be higher as use continued to escalate, with nearly 30 percent of all feedstocks used in biodiesel production being rendered fats and oils. One reason for the appeal is the lower price for rendered products, while another attraction as the RFS2 works its way to becoming finalized is the proven sustainability of rendered fats and oils, reducing GHG emissions by 88 percent.

**Alternative Fuel Mixture Credit**

While renderers are eager to see the tax credit extended so their fats and oils will continue to be used in biodiesel production, perhaps more important is the expiration of the

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Biofuels Demand to Remain High

According to a new analysis by Hart Energy Publishing, LP, in Houston, TX, global use of biofuels is expected to more than double from 2009 to 2015, despite a number of key issues such as land use and competition for feedstock supplies for traditional food and feed uses. Leading the expansion is the United States with a growth of total biofuels use of more than 35 percent. Brazil will grow domestic supplies by 30 percent and more than double export volume. Indonesia and Malaysia will more than double production of palm oil biodiesel, while Germany will remain the largest producer of biofuels in Europe.

Hart expects major new contributors to the growth of global biofuels through 2015 to include Indonesia, France, China, India, Thailand, Colombia, Malaysia, the Philippines, and Argentina. Palm oil biodiesel and rapeseed biodiesel from Europe will continue to be the dominate biofuels produced. However, Hart projects commercial production and use of next-generation biofuels to remain behind expectations.

The U.S. Energy Information Administration (EIA) in Washington, DC, is predicting moderate energy consumption growth through 2035, with greater use of renewable fuels. EIA states that by 2035, fossil fuel share of total U.S. energy consumption will fall from 84 percent to 78 percent, with the shift coming from renewable fuels.
Two recently released reports show that biofuels are a major player in reducing greenhouse gas (GHG) emissions. The first study is an independent third-party analysis of Canadian renewable fuel production that conclusively confirms Canadian produced ethanol and biodiesel significantly reduce GHG emissions.

Cheminfo Services, Inc., a specialized environment, energy, transportation, and chemicals consulting firm, was hired by the Canadian Renewable Fuels Association (CRFA) to analyze a sample of eight ethanol plants and three biodiesel plants in Canada. The analysis was conducted using the most recent version of the Natural Resources Canada GHGenius life cycle assessment model for transportation fuels. The study is the first of its kind in Canada to draw exclusively upon Canadian renewable fuel facilities.

Analysis of the Canadian renewable fuel plants found:

1. On an energy basis, the reduction in fuel cycle GHG emissions from one megajoule (MJ) of ethanol (when used in a 10 percent fuel blend) is 62 percent of the fuel cycle GHG emissions for one MJ of gasoline.

2. On an energy basis, the reduction in fuel cycle GHG emissions from one MJ of tallow-based biodiesel (when used in a five percent fuel blend) is 99 percent of the fuel cycle GHG emissions of one MJ of petroleum diesel (applied over the same road performance distance).

Biodiesel production of 93.6 million liters (24.7 million gallons) was reported by three plants in Canada, all of which used tallow rendered from animal carcasses as feedstock. This is approximately 85 percent of total Canadian biodiesel capacity active during the data reporting period of April 2008 to March 2009. More than half of the reported production came from an Ontario plant, with plants in Quebec and Alberta contributing the remainder.

The study reports that volume of biodiesel resulted in a reduction of 306,601 tons of life cycle GHG emissions compared to petroleum diesel. The study’s finding that the reduction in fuel cycle GHG emissions from one MJ of tallow biodiesel (when used in a five percent blend) is 99 percent of the fuel cycle GHG emissions of one MJ of petroleum diesel is calculated based on three factors (results are shown in Table 1):

- Volumetric results from GHGenius that show that the reduction in fuel cycle GHG emissions from one liter of a 95 percent diesel/five percent tallow biodiesel (TD5) fuel blend is 164 grams (g) carbon dioxide equivalent (CO₂e) per liter (L) of TD5, or 4.7 percent of the fuel cycle GHG emissions for one liter of petroleum diesel. The calculation of this reduction is based on equivalent vehicle performance by distance.
- Adjustment of the volumetric fuel cycle GHG intensity from -164 g/L TD5 (a TD5 basis) to -3,273 g/L 100 percent tallow biodiesel (TD100 basis) by dividing by five percent the tallow diesel content in TD5; and
- Adjustment of the volumetric fuel cycle GHG intensities for petroleum diesel and TD100 to an energy basis using the energy contents of the respective fuels (38.65 MJ/L for petroleum diesel and 36.94 MJ/L for tallow biodiesel).

It is important to note that the -3,273 g/L TD100 reduction in GHG intensity (on a volumetric TD100 basis) cannot be directly compared to the 3,463 g/L petroleum diesel volumetric baseline GHG intensity because they are expressed on a different basis. The 4.7 percent reduction in volumetric GHG intensity from the use of one liter of TD5 (versus one liter of petroleum diesel) does not directly convert by 20 times to a 94 percent reduction in volumetric GHG intensity from the use of one liter of TD100 (versus one liter of petroleum diesel) because the energy content of one liter of TD100 is slightly lower than that of petroleum diesel.

Details of the calculation of the difference in GHG intensity are provided in the full report. The input factors for life cycle analysis using GHGenius are also detailed in the report, entitled “Life Cycle Assessment of Renewable Fuel Production from Canadian Biofuel Plants for 2008-2009,” which can be downloaded at www.greenfuels.org.

### Biofuels Cause Major Drop in Global GHG

A second report also confirms that biofuels reduce GHG emissions considerably, this time on a global scale.

Data prepared by (S&T)² Consultants, Inc., an energy and environmental consulting firm based in Canada, demonstrates...
Table 2. World Biodiesel Production, 2009

<table>
<thead>
<tr>
<th>Region</th>
<th>Production Million Gallons</th>
<th>GHG Reduction kilograms CO₂e/L</th>
<th>GHG Reduction 1,000 tons</th>
<th>Feedstocks</th>
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</thead>
<tbody>
<tr>
<td>European Union</td>
<td>2,602</td>
<td>2.13</td>
<td>20,986</td>
<td>Rapeseed (50%), soy (40%), palm (5%), tallow (5%)</td>
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<tr>
<td>United States</td>
<td>444</td>
<td>2.40</td>
<td>4,030</td>
<td>Soy (40%), tallow (20%), canola (20%), palm (20%)</td>
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<tr>
<td>Brazil</td>
<td>366</td>
<td>2.38</td>
<td>3,302</td>
<td>Soy (80%), tallow (10%), other veg. oils (10%)</td>
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<tr>
<td>Argentina</td>
<td>330</td>
<td>2.39</td>
<td>2,988</td>
<td>Soy</td>
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<tr>
<td>Thailand</td>
<td>162</td>
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<td>Palm</td>
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<td>Waste veg. oil</td>
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<td>Palm</td>
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<td>Coconut</td>
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<td>South America (other)</td>
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<td>Palm</td>
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<td>101</td>
<td>Palm (33%), soy (33%), waste veg. oil (33%)</td>
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<td>Waste veg. oil</td>
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<tr>
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<td>World Total</td>
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<td>35,866</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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Render • February 2010 15
New Mexico Leaders Take Step in Developing Sustainable Biofuels Industry

New Mexico Governor Bill Richardson and the state’s congressional delegation launched an initiative in early December to develop a statewide strategic plan to make New Mexico a national leader in the emerging biofuels industry.

The initial meeting for the initiative, “Toward a New Mexico State Plan for Biofuels Leadership,” brought together more than 50 national and state experts from industry, science, education, agriculture, nonprofit, and government to begin development of a comprehensive roadmap for sustainable, economically feasible, and cost-competitive biofuels that capitalizes on the state’s human and natural resources.

Richardson and Senators Jeff Bingaman and Tom Udall joined Representatives Harry Teague, Martin Heinrich, and Ben Ray Lujan in signing a letter of invitation to experts who will be the architects of the plan. Earlier in 2009, Teague introduced the Biofuel Engineering Training Act and the Algae-based Renewable Fuel Promotion Act of 2009 to support the growth of the biofuels industry in New Mexico.

The December 9, 2009, kickoff meeting was coordinated by the Southwestern Biofuels Association (SWBA), a nonprofit organization that promotes renewable biofuels through strategic partnerships between the Southwest’s universities, national laboratories, state agencies, agriculture, energy industry, and consumers.

Participants planned to meet over the winter months to develop specific recommendations and strategies focused on sustainable feedstocks, energy markets, science, research and development, production and distribution, jobs, education, and outreach. The public will be invited to attend workgroup sessions and comment on elements of the plan as it develops. An advisory panel, including representatives from the state’s biofuels industry and supporting organizations, also will provide input to the plan that will be unveiled April 13-14, 2010, at the SWBA Biofuels Policy Summit in Albuquerque, NM. The plan will be open for public comment until May 30, 2010.

Plan documents, meeting dates, times, and locations, along with other information, will be posted on the SWBA Web site at www.swbiofuels.org. Interested parties can post comments via the Web site as documents become available for review.

“The extraordinary level of cooperation between policymakers, industry, scientists, and farmers is a major step forward for the timely development of next-generation biofuels with low energy inputs, large production potential, and easy distribution,” said Tim Zenk, SWBA chairman and vice president of Sapphire Energy. “We look forward to working with this distinguished group of experts on viable solutions to achieving energy independence.”

Animal Fats and REG Victorious Again in Hawaiian Electric Bidding

Hawaiian Electric Company has signed a contract with a subsidiary of Iowa-based Renewable Energy Group (REG) to supply three to seven million gallons of renewable biodiesel per year for two years to be used for Hawaiian Electric’s new 110-megawatt combustion turbine generator unit at Campbell Industrial Park Generating Station (CIP GS).

REG, which won an earlier bid to supply 400,000 gallons of biodiesel for emissions testing in the unit, emerged as the winning bidder from among eight companies seeking to fill the two-year contract. As in the earlier contract, the new agreement calls for REG to supply high quality biodiesel processed from used cooking oil and waste animal fat.

As with all Hawaiian Electric fuel contracts, this contract has been submitted to the Hawaii Public Utilities Commission (PUC) for approval, with input from the Hawaii Division of Consumer Advocacy, before the contract can be included in Hawaiian Electric fuel costs. Delivery of the biodiesel could begin within about four months of PUC approval.

“This contract is an important step forward in our efforts to create a clean energy economy for Hawaii,” said Robbie Alm, Hawaiian Electric executive vice president. “We must pursue every renewable resource available – the sun, wind, our land, and oceans – and take advantage of our unique ability to substitute green fuels in place of black oil-based fuels in our generating units.

“We are glad to continue working with Renewable Energy Group on this essential step in meeting our commitment to the PUC and Consumer Advocate to power the new CIP GS unit with renewable biodiesel,” Alm continued. REG operates a national network of biodiesel production with the capacity to produce more than 300 million gallons of biodiesel per year.

California City Begins Grease Collection

The city of Santa Monica, CA, has launched a program to collect fats, oil, and grease (FOG) free of charge from city restaurants and turn them into biodiesel. Partnering with GeoGreen Biofuels, the city is providing 50-gallon drums in various downtown parking structures where restaurants and residents can deposit their FOG. GeoGreen will then collect the containers and process the waste oil into biodiesel. Wes Thompson of the City of Santa Monica said Darling International, Inc., collected the drums previously but the city turned to a
contractor that will convert the waste grease into biodiesel. The city will not be providing any collection service to area restaurants, which are responsible for transporting and disposing of their waste cooking oil into the drums.

**Canadian Renderer Honored as a Pioneer**

The Canadian Renewable Fuels Association recently honored pioneers in the development and commercialization of low carbon renewable fuels such as ethanol and biodiesel in Canada. Among the 2009 Green Fuels Award recipients was Maple Leaf Foods, Inc., which received the Fuel Change Award for achievement in promoting the use of renewable fuels in Canada. Maple Leaf’s subsidiary, Rothsay, operates a biodiesel facility that converts animal fats and recycled cooking oil into an alternative fuel that reduces harmful greenhouse gases, and can be used in all diesel engines.

Below are other 2009 Green Fuels Award recipients that produce biodiesel.

- The New Producer Award went to Bio-Diesel Quebec, Inc., which began producing biodiesel in its 10 million liter (2.6 million gallons) per year facility in Saint-Alexis-des-Monts, QB, and Milligan Bio-Tech, Inc., which started producing biodiesel from canola at its 25 million liter (6.6 million gallons) per year facility in Foam Lake, SK.
- The Green Fuels Industry Award 2009 for outstanding dedication to the advancement of renewable fuels in Canada was given to Mark Stumborg, an engineer at Agriculture Canada’s Swift Current Research Center who played a critical leadership role in formative years of ethanol and biodiesel in Canada.

**Feedstock Comparison Study Released**

Renewable Energy Group (REG) recently released *Biodiesel and Feedstock Characteristics Report* that outlines the results for biodiesel made from more than 30 commercially available and unique feedstocks. REG’s analysis utilized lab-scale pretreatment and production that mimic today’s commercial biodiesel processes.

*Continued on page 18*
Biofuels Continued from page 17

The report showcases benchmarks for traditional and unique oils and fats and, for the first time, makes available side-by-side comparisons of the feedstocks’ fatty acid profiles and resulting biodiesel characteristics. Samples tested in the comparison study include already-commercialized oils and fats such as soybean, canola, used cooking oil, poultry fat, and tallow, and some novel, global feedstocks, such as coffee, rice bran, and jatropha, that are typically difficult to acquire and have not been widely studied or cited in industry literature.

Biodiesel was produced from each of the feedstocks and tested for compliance with ASTM D 6751 specifications for transportation fuel. To produce the biodiesel, REG designed a uniform method for pretreating the crude feedstock, esterifying the free fatty acids, transesterifying the triglycerides, and filtering the finished methyl ester.

The production method used in the study was based on a literature review and REG’s extensive knowledge of biodiesel production techniques. Eliminating the variables of pretreatment and production allowed for a more direct comparison of the feedstocks. The entire process is detailed in the report, which is available free of charge at www.regfuel.com.

The study was funded in part through a grant by the Iowa Power Fund administered through the Iowa Office of Energy Independence.

Grants Awarded for Biorefinery

The Iowa Power Fund Board has approved a $3.9 million grant and final contract terms that will help transform the Renewable Energy Group (REG) biodiesel facility in Newton, IA, into an integrated biorefinery that will produce high-value specialty chemicals and jet fuel from renewable fats and oils.

According to the Office of Energy Independence, the collaborative effort between Elevance Renewable Sciences, REG, and Technochem will demonstrate the ability to convert existing biodiesel facilities with bolt-on technology to produce diversified biochemical product streams. The Power Fund grant provides incentive to secure the demonstration project being built in Newton, creating 40 to 50 positions this year. The investment enables the use of existing biodiesel plant infrastructure that allows for expedited commercialization versus building new facilities, said K’Lynne Johnson, Elevance’s chief executive officer.

The biorefinery will be based on Elevance’s novel technology olefin metathesis, which won the Nobel Prize in chemistry in 2005, to convert soybean oil, inedible corn oil, animal fats, and other raw materials into jet fuel, high-value specialty chemicals, and biodiesel. The plant will be used to evaluate a variety of renewable feedstocks, produce products for market development, and develop data that can be applied in the design of a commercial scale unit.

In early December 2009, Elevance was awarded a $2.5 million grant from the U.S. Department of Energy to fund preliminary engineering design for the biorefinery. According to the company, the DOE grant framework focused on “inedible, domestically produced, high-impact and high-volume feedstocks,” of which poultry fat meets the criteria. Elevance also received $109,500 from the United Soybean Board to enhance the use of soybean oil as an ingredient in naturally-derived petrolatum alternatives.

Using its technology, Elevance creates high performance waxes, functional oils, antimicrobials, lubricants, additives, and other chemicals.

Imperium Renewables Suffers Explosion

In early December, a glycerin processing tank in the glycerin refining section of Imperium Renewables’ Grays Harbor, WA, biodiesel plant ruptured as a result of over-pressurization due to an oversupply of sulfuric acid into the glycerin neutralization tank, which caused an unexpected exothermic reaction. There were no injuries or fire.

Imperium’s glycerin neutralization process is a secondary and wholly separate chemical process from the transesterification facility that is used to produce biodiesel. According to the company, in order for glycerin, a by-product of biodiesel, to be marketed to end users, it must have a neutral pH level. Typically, sulfuric acid is mixed with glycerin to neutralize the pH level.

When mixed in the recommended ratio, the chemical reaction does not pose a safety threat.

On December 2, 2009, Imperium personnel mixed sulfuric acid in a much higher ratio, which created the exothermic reaction. Personnel were unaware of the potential for such a reaction, and the processing equipment was not designed with physical or mechanical safeguards to prevent an oversupply of sulfuric acid.

“We are taking steps to make sure this cannot, and does not, ever happen again,” said Imperium Chief Executive Officer John Plaza.

After consulting with chemical, mechanical, and industrial engineers, Imperium is replacing the glycerin neutralization tank with a complete new system equipped with stringent safeguards to prevent an oversupply of sulfuric acid. The company has also instituted new employee training and safety programs on-site. Imperium will also be working with industry trade groups to increase the awareness among biodiesel producers about the potential for hazards in the glycerin neutralization process. The facility will restart once damage is repaired and the new equipment has been installed and tested for safety.

ISO Standard to Make Bioenergy Sustainable

The International Organization for Standardization, or ISO, will develop an international standard to address sustainability issues linked to bioenergy. The standard will be produced by a new ISO project committee, ISO/PC 248, Sustainability Criteria for Bioenergy.

The committee will bring together international expertise and state-of-the-art best practice to discuss the social, economic, and environmental aspects of the production, supply chain, and use of bioenergy, and identify criteria that could prevent it from being environmentally destructive or socially aggressive.

The decision to develop the standard responds to the growing international interest in bioenergy, and the current lack of globally harmonized sustainability criteria. Already some 29 countries are involved as participants or observers, including large markets such as China and the United States. Brazil and
Germany will provide the secretariat and leadership of the committee under a twinned arrangement.

ISO/PC 248 will hold its first meeting in April 2010.

National Biodiesel Group Elects Leadership

National Biodiesel Board members selected their trade association leadership last November. Officers elected to lead the board are Ed Hegland, chairman, Minnesota Soybean Promotion and Research Council; Gary Haer, vice chair, Renewable Energy Group, Inc.; Ed Ulch, secretary, Iowa Soybean Association; and Jim Conway, treasurer, Griffin Industries.

Piedmont Biofuels Awarded Research Grant

Piedmont Biofuels Industrial in Pittsboro, NC, will receive a $139,249 American Recovery and Reinvestment Act grant for innovative clean energy research and development. The company will use the funds to develop advanced biodiesel production processes that will enable biodiesel producers to reduce water usage and waste by-product as well as use lower grade feedstocks, such as poultry fat.

Piedmont Biofuels’ commercial production facility in Pittsboro produces approximately 4,000 gallons of biodiesel a day using waste poultry fat or used cooking oil. The Recovery Act funding is part of the Small Business Innovation Research program, which works to increase the participation of small, innovative companies in federally-funded research and development.

Swiss Commodity Trader Purchases Biodiesel Firm

Switzerland-based Glencore, one of the world’s largest suppliers of commodities and raw materials, has taken a majority stake in Swiss biodiesel producer Biopetrol Industries AG through the acquisition of 50 percent plus one share. The shares were acquired from the previous majority shareholders. In addition, Glencore has the option to increase its holding to a two-thirds majority. The details of the contractual agreements and the acquisition price remain confidential, and completion of the transaction is subject to an approval of the relevant anti-trust authorities.

With its German, Dutch, and Swiss subsidiaries, Biopetrol Industries AG, headquartered in Zug, Switzerland, produces and sells biodiesel and pharmaceutical-grade glycerin. Currently, the company has an annual production capacity in the German towns of Schwerin and Rostock of around 350,000 tons (95 million gallons) of biodiesel and 30,000 tons of pharmaceutical-grade glycerin. In Rotterdam, the Netherlands, Biopetrol is close to completion of a facility with an annual production capacity of 400,000 tons (108 million gallons) of biodiesel and 60,000 tons of glycerin.

Founded in 1974, Glencore is a privately held group owned by its management and employees. Headquartered in Baar, Switzerland, the company employs over 2,000 people in its global marketing operations in some 50 offices in over 40 countries. In its industrial operations, Glencore employs over 50,000 people at 15 plants in 13 countries.

Zenergy Acquires Greenlight Biofuels

Chicago, IL-based Zenergy International, Inc., has acquired Greenlight Biofuels, Ltd., and its assets for $1.5 million. This is the first of numerous planned acquisitions by Zenergy.

In its acquisition of Greenlight Biofuels, Zenergy has taken ownership of the multi-feedstock biofuel plant situated on 40 acres in Littlefield, TX, with a capacity of five million gallons per year. The facility is strategically located on the transport corridor, close to a number of transport fueling depots.

Zenergy has also secured substantial feedstock to continue operations at the Greenlight Biofuels facility, although the company would not disclose amount, source, or type of feedstock. The feedstock purchased will enable the company to restart the plant and begin production, reaching full-scale production by the second quarter of 2010. R
Working for the Good of the Industry

“Every man owes a part of his time and money to the industry or business in which he is engaged. No man has a moral right to withhold his support from an organization that is striving to improve conditions within his sphere.”

– Theodore Roosevelt, 1918

This quote might have been used in an earlier column many years ago. If so, repetition doesn’t hurt. This sentiment by the former U.S. president is as true today as it was 92 years ago, and I very much agree with it. However, I also believe it is legitimate to put the organization to the test to truly determine that it is striving to improve conditions within its sphere.

The National Renderers Association (NRA) passes the test. For the past 76 years, the NRA has represented and stood up for the industry, sometimes against great odds. Today, it is the only national organization dedicated exclusively to the interests of the rendering industry.

The challenges facing the industry today are numerous. Some continue to be the same while new ones keep surfacing. Our platter is always full.

Several years ago, NRA leadership determined the organization should focus on issues where it could better serve the members collectively than renderers could do themselves as individuals. Government affairs, scientific services, public relations, and trade are the ones that rise to the top of the issues we find ourselves actively and regularly engaged. Each of these areas is important to the well-being and prosperity of the rendering industry.

Government affairs might be the most obvious because of its scope. Federal, state, legislative, regulatory, and judicial are all areas we must vigilantly monitor and exert our influence.

Much of the past 25 years has been spent dealing with bovine spongiform encephalopathy (BSE), touching each of the areas just mentioned. While everything did not turn out as we would have liked, without the NRA at the table during the regulatory process, renderers would be facing even more restrictive regulations. NRA continues to seek the reopening of foreign markets lost because of BSE, and while our progress is slow, it is improving.

In recent years, the NRA has been active and instrumental in making sure rendered products were included in various bioenergy related programs such as the biodiesel and alternative fuels mixture tax credits. These programs have contributed to the increased demand for rendered fats and oils. Without the NRA going to both the U.S. Department of Agriculture (USDA) and Congress several years ago, rendered products would have been overlooked and not included in the various alternative energy programs, putting renderers at a significant competitive disadvantage.

The annual NRA Washington fly-in has been a tremendous investment for the industry. Every June for the past eight years a dedicated number of NRA members have gone to Washington, DC, to tell the industry’s positive story and spread the word on the many contributions the rendering industry provides to society. Literally hundreds of congressional offices have been visited. Members of Congress and their staffs have been enlightened and educated about the industry. Valuable contacts have been made between the congressional offices and their constituents, which are the renderers in their states and districts.

The NRA leadership and staff are continually representing the industry to various government agencies both domestically and internationally on trade issues. We regularly host foreign delegations that come to the United States to learn more about this industry. These activities have directly contributed to the opening and expanding of exports to new markets.

The rendering industry has enjoyed an enviable reputation for product safety. This is in part due to the unusually high industry compliance to the feed rule and the industry code of practice program. The NRA/Animal Protein Producers Industry Code of Practice certification program is in its fourth year with 98 plants certified. This program is not only beneficial to the certified facilities, but also benefits the industry as another sign of our commitment to product safety.

In recent years we have found ourselves dealing with issues like climate change, sustainability, cap and trade, greenhouse gas emissions, and carbon footprints, just to name a few. The rendering industry is definitely an interested party when the government – i.e., Congress, the Environmental Protection Agency (EPA), USDA, Health and Human Services, Internal Revenue Service, Food and Drug Administration, and other agencies – decides to further legislate and regulate on these matters. The current tone in Washington, DC, is for increased oversight and regulation. EPA’s recent action on greenhouse gas emissions has caused a significant increase in judicial involvement in this rulemaking process, creating a bonanza for the lawyers. NRA has attended several meetings with other affected groups to explore options.

It is hard for individual renderers to come to town to represent themselves. This is what the NRA does. It represents the industry on behalf of its members, speaking with one unified and strong voice, which is much more effective. The industry needs to be at the table day-in and day-out, not “on” it.

NRA is always available when members call with specific concerns or requests. Our effectiveness is only as good as the organization we represent. Members who support the organization through their active participation and financial assistance are what make the NRA the respected organization it is. But just as important, all renderers benefit from the programs and activities of the NRA, so if you are not currently a member, perhaps Roosevelt’s words need to be revisited.
Uproar over EPA's Finding that Greenhouse Gases Endanger Public Health

After what it calls a “thorough examination of scientific evidence” and consideration of more than 380,000 public comments, the Environmental Protection Agency (EPA) has determined that greenhouse gases (GHGs) threaten the public health and welfare of the American people. EPA also found that GHG emissions from on-road vehicles contribute to that threat.

These final findings are in response to an April 2007 U.S. Supreme Court decision that GHGs fall within the Clean Air Act definition of air pollutants. These findings do not in and of themselves impose any emission reduction requirements, but do allow EPA to finalize GHG standards proposed in 2009 for new light-duty vehicles as part of a joint rulemaking with the Department of Transportation’s National Highway Safety Administration.

EPA has already established a nationwide GHG emissions reporting system. Beginning January 1, 2010, EPA is requiring facilities that emit 25,000 metric tons or more of carbon dioxide equivalent per year to collect GHG data under the new reporting system. It is estimated that roughly 10,000 facilities will fall under the new rules. The first annual reports for the largest emitting facilities, covering calendar year 2010, will be submitted to EPA in 2011. At that time, under a proposed rule, those facilities will be required to incorporate the best available methods for controlling GHGs when they plan to construct or expand.

EPA’s findings immediately raised concerns among industry groups, including the National Cattlemen’s Beef Association (NCBA), and legislators. NCBA is “extremely concerned” about the potential impact on agriculture operations, so much so the organization filed a petition in late December in the District of Columbia Court of Appeals challenging EPA’s “endangerment finding” rule. The petition NCBA filed, as part of a coalition of interested parties, is the first step in asking the court of appeals to overturn EPA’s rule due to a lack of sound or adequate basis for making the finding of endangerment from anthropogenic GHGs.

While agricultural sources are currently generally not required to obtain permits for GHG emissions, regulations of GHGs under the Clean Air Act may, for the first time, trigger such regulation, said NCBA. According to EPA, in 2007, GHG emissions from the entire agriculture sector represented less than six percent of total U.S. GHG emissions in tons of carbon dioxide equivalent, and the livestock industry emitted only 2.8 percent. On-road vehicles contribute more than 23 percent of total U.S. GHG emissions.

“EPA’s finding is not based on a rigorous scientific analysis; yet it would trigger a cascade of future greenhouse gas regulations with sweeping impacts across the entire U.S. economy,” said Tamara Thies, NCBA’s chief environmental counsel. “Instead of letting the issue of climate change, and man’s alleged contribution to it, be addressed through the proper democratic legislative process, EPA has decided to trump Congress and mandate greenhouse gas regulation under the Clean Air Act. The act is ill-equipped to address climate change, and Congress never intended for it to be used for that purpose.”

Apparently Congress agrees. One legislator has taken a step toward prohibiting EPA from regulating GHGs. In early January, Congressman Earl Pomeroy (D-ND) introduced a bill, House of Representatives (H.R.) 4396, the Save Our Energy Jobs Act, that would prohibit the EPA from regulating GHGs.

Once EPA’s rule on light-duty vehicle emissions becomes final, GHGs will officially be regulated pollutants under the Clean Air Act subsequently subjecting stationary sources that emit GHGs, such as power plants and factories, to regulation under the act. According to Pomeroy, such regulation could significantly raise energy prices and endanger thousands of jobs.

“Regulation of greenhouse gas emissions under the current provisions of the Clean Air Act is irresponsible and just plain wrong,” Pomeroy stated. His bill also supports the North Dakota Association of Rural Electric Cooperatives’ position that Congress should be in charge of setting policy on climate change legislation at a pace that’s fair, affordable, and achievable.
Canada Invests in Biodiesel Research, British Columbia Mandates Blend

A glimpse around the world shows biodiesel activities in various countries continues to escalate, but none more so than in Canada, where research into using the fuel in cold weather and year-round is escalating and mandated blends are put in place.

Canadian Pacific, a rail freight provider, and Natural Resources Canada have partnered on an industry-leading biodiesel fuel pilot project under the National Renewable Diesel Demonstration Initiative. The Government of Canada is investing over $800,000 in this project in an effort to find ways to help reduce Canada’s total greenhouse gas emissions. It is the first time biodiesel will be used in Canadian cold-weather rail service.

Canada’s government has announced its intention to mandate an average five percent renewable fuel content in the nation’s gasoline by 2010, and require an average two percent renewable content in diesel fuel and heating oil by 2011 or earlier, subject to technical feasibility. The National Renewable Diesel Demonstration Initiative provides an opportunity for real-world testing and performance evaluation in advance of these regulatory actions.

“Rail is already the most efficient means to move goods long-haul,” said Fred Green, president and chief executive officer, Canadian Pacific. “This initiative positions Canadian Pacific to make a lasting impact by further reducing our network’s environmental footprint. This partnership with the Government of Canada is an opportunity to test the reliability of biodiesel in cold weather, ensuring we continue to provide safe and efficient operations for customers across North America.”

As part of the five-month test cycle, the train company will operate four General Electric diesel locomotives in captive service between Calgary and Edmonton. General Electric and Calgary-based fuel supplier 4Refuels are cooperating with Canadian Pacific during the testing phase, which began in early November and will run through the end of March 2010.

Canadian Pacific will undertake routine detailed mechanical examinations of the locomotives in the pilot project. The information gathered will be used to determine if a biodiesel mixture of five percent (B5) has any significant adverse effects on a locomotive or its associated systems in cold-climate operation. Impact to reliability, potential changes to the overhaul or maintenance work scope, and reviews of specific components on the locomotives will also be monitored.

In another Canadian research project, the Saskatchewan Research Council will seek how well biodiesel performs year-round in agriculture equipment. Also supported under the National Renewable Diesel Demonstration Initiative, the pilot project will help the research council access biodiesel’s quality retention and performance in farming equipment and bulk storage facilities in all seasons, including the coldest winter months. The Government of Canada is investing $782,000 in the demonstration project that also aims to reduce the country’s total greenhouse gas emissions and assist the government in moving forward with its proposed renewable fuels regulations.

During the year-long project, eight agriculture producers will operate their equipment using low-level (B5) and high-level (10 percent biodiesel, or B10) canola-based biodiesel blends to determine whether they effect engine performance. Five producers will operate year-round on a B5 blend, while three others will use B10 during warmer months and B5 the rest of the year.

As part of the study, the Saskatchewan Research Council will evaluate approximately 50 tractors, combines, swathers, and related farm fuel storage tanks. Biodiesel quality will be closely monitored and evaluated to ensure that the fuel maintains adequate quality throughout the year-round farming cycle. The study is expected to be complete in November 2010.

Canadian Province Mandates Blend, Removes Tax Exemption

In British Columbia, the government has enacted its Renewable and Low Carbon Fuel Requirements regulation, which in December 2008 established a five percent provincial annual average renewable fuel requirement for 2010. A regulation passed in December 2009 amended the 2008 law to include new requirements to reduce the carbon intensity of transportation fuels by 10 percent by 2020, and adjusted the five percent renewable fuel requirement for diesel set for January 1, 2010, to now be phased in with a three percent target for 2010, four percent for 2011, and five percent by 2012. These regulations are made under the Greenhouse Gas Reduction (Renewable and Low Carbon Fuel Requirements) Act, which was passed in May 2008.

In response to concerns raised by the petroleum industry and diesel fuel users, British Columbia’s Ministry of Energy, Mines, and Petroleum Resources stated the phased-in approach for diesel fuel was chosen to provide time to put the necessary supply infrastructure in place and address technical issues regarding the cold weather properties of biodiesel and engine manufacturer warranties. The five percent renewable requirement for gasoline in 2010 remains unchanged.

While the three percent biodiesel mandate is good news for the increased use of the alternative fuel and the reduction in greenhouse gas emissions, British Columbia’s Ministry of Finance announced that also effective January 1, 2010, ethanol and biodiesel will no longer be exempt under the Motor Fuel Tax Act. Previously, both alternative...
On November 17, 2009, Philippine Secretary of Agriculture Arthur Yap announced the lifting of the temporary ban on ruminant meat and bone meal imports from the United States. The original ban was due to concerns over bovine spongiform encephalopathy. The U.S. designation of “controlled risk” by the World Organization for Animal Health, combined with the U.S. risk mitigation measures put in place, including the enhanced feed rule, assisted in the decision by the Philippine Department of Agriculture to lift the ban.

The National Renderers Association (NRA) began working with the U.S. Department of Agriculture’s (USDA’s) Foreign Agricultural Service (FAS) early in 2009 to discuss the opportunity of regaining market access to the Philippines for U.S. meat and bone meal. As FAS began the discussions with their Philippine counterparts, the NRA led a delegation to Manila to meet with relevant industry contacts and government officials. The delegation consisted of Peng Li, NRA director for Asia; Dr. Don Franco, past president of the Animal Protein Producers Industry; and Kent Swisher, NRA vice president, International Programs. These efforts culminated in the NRA hosting a Philippine government delegation to visit U.S. rendering plants in early September 2009, and the subsequent announcement by Yap.

Of crucial importance to the behind-the-scenes negotiations were the efforts of the FAS staff at the American Embassy in Manila, including Ag Counselor Emiko Purdy, Agriculture Attaché David Wolf, and their staff. In addition, the visit to the Philippines by U.S. Secretary of Agriculture Tom Vilsack in October 2009, and his focus on promoting meat and bone meal, cannot be overlooked. In short, the help received by FAS was important in lifting the ban.

However, after all the fanfare, the market is not yet officially open as the Philippine Department of Agriculture and USDA’s Animal and Plant Health Inspection Service are in the process of finalizing negotiations for the import requirements of meat and bone meal. As with most market access discussions, the announcement of the market being open is not the actual opening of the market. The import requirements dictate more importantly if and when product can be exported. Hence, while most agriculture media outlets have reported that the market is open, the rendering industry has hesitated in doing so.

Editor’s Note: On February 4, 2010, import requirements were finalized, legitimately opening the market.
Biodiesel Synthesis from Animal Fats Using Solid Catalysts

In the United States, approximately 11.5 billion pounds of animal fats and greases are generated annually, which, if used for biofuels, could generate 1.5 billion gallons of biodiesel. Recognizing the great potential of using animal co-products for biodiesel production, Clemson University Animal Co-Products Research and Education Center (ACREC) researcher Dr. James G. Goodwin Jr. has conducted studies on improving catalysts for optimizing biodiesel production.

Biodiesel can be produced from a variety of feedstocks, including highly refined vegetable oils, animal fats, and waste greases, via the chemical process known as transesterification of triglycerides and esterification of free fatty acids (FFAs). Catalysts affect chemical reaction rates by changing the activation energy needed for the reaction to proceed. As a result, catalysts can increase or decrease a reaction rate. In the reaction, the catalyst is not consumed by the reaction; however, generated reaction products and/or contaminants such as water can poison the catalyst, resulting in the need to purchase more catalyst for additional reactions.

In the production of biodiesel, either alkaline or acid catalysts may be used. Conventional biodiesel production techniques use a liquid catalyst. However, the liquid catalyst can only be used once and, upon completion of the reaction, must be separated from the product by neutralization and removal of the resulting salt. All of this greatly adds to the costs of biodiesel production.

In conventional biodiesel production, refined vegetable oils (triglycerides) are reacted with low molecular weight alcohols such as methanol or ethanol in the presence of a catalyst. Most of the earlier biodiesel reactors were batch reactors as opposed to continuous reactors. The catalyst used in this batch reactor system is known as a “homogeneous catalyst” and typically is a single alkaline chemical such as sodium methylate, sodium hydroxide, or potassium hydroxide. The use of these refined vegetable oils is expensive — often costing 60 to 75 percent of the biodiesel value per gallon. Use of lower cost raw materials such as high FFA greases and animal fats could reduce the cost of biodiesel production and improve its competitiveness with petroleum diesel. However, lower cost waste grease and animal fat feedstocks are not readily amenable to biodiesel production methods using strong alkaline catalysts. High levels of FFAs and water in the starting materials can undergo undesirable reactions with alkaline catalysts resulting in contaminants that are difficult and expensive to remove or which can poison the catalyst.

Goodwin realized that use of a different kind of catalyst and a different kind of reactor system could have significant advantages for biodiesel producers. A group of catalysts known as “heterogeneous” or “solid catalysts” could result in less cleanup and separation steps to remove the catalyst from the finished product and by-products. Because the heterogeneous catalyst is a solid material, removal of the catalyst is accomplished by simple separation methods. In comparison to the liquid alkaline catalysts typically used, the cost of separation is much lower when using solid catalysts, allowing a more efficient and economical way of manufacturing biodiesel. In addition, solid catalysts are less corrosive to processing equipment than the homogeneous catalysts.

In general, any type of batch chemical reactor results in more expensive processing costs as compared with a continuous processing system. Goodwin recognized that the biodiesel industry needs a continuous reactor system and that conversion to continuous biodiesel production methods has been prevented by the limitations of homogeneous catalysts. Choice of a solid catalyst
opens new possibilities for continuous reaction systems that could greatly reduce processing costs while increasing product yields. A by-product of biodiesel production is glycerin. The common batch type biodiesel production system using homogeneous catalysts yields glycerin that contains a variety of contaminants, including catalyst residues, methanol, and other reaction by-products. As a result, this glycerin can only be used as cheap heating fuel at one- to two-cents per pound as opposed to clean glycerin that has greater potential use and sells for upwards of 98-cents per pound. Also, in the batch reactor system using homogeneous catalysts, high FFAs are detrimental to biodiesel production as soaps can form. Water can cause the formation of FFAs from triglycerides and any residual water in animal fats could impede biodiesel production with homogeneous catalysts and thus increase processing costs.

Cleaner glycerin by-products that could be used in more applications and command a higher price are generated using solid heterogeneous catalysts. Goodwin also noted that use of fats that contain a high level of FFAs and some water might actually be beneficial for biodiesel production with solid heterogeneous catalysts and would allow lower quality and lower cost feedstocks to be converted into value-added biodiesel.

Goodwin conducted a study on the use of solid acid catalysts for generating biodiesel from high FFA oils and fats using reaction temperatures of 110 to 150 degrees Celsius (230 to 302 degrees Fahrenheit) at atmospheric pressure. Since FFAs react faster than the intact triglycerides on acid catalysts, he proposed the idea of a two-step reaction using solid acid catalysts rather than the use of liquid acid catalysts that involves four steps of pre-esterification with a homogeneous (liquid) acid catalyst, separation of residual catalyst and generated water, transesterification with a homogeneous (liquid) alkaline catalyst, and removal of the alkaline catalyst. Use of a two-step solid acid catalyst system would allow use of feedstock containing greater than five to 15 percent FFAs and high concentrations of water.

Goodwin proposed in his project to study efficient heterogeneous catalyst systems for producing biodiesel that is economically competitive with petroleum-derived biodiesel. He also proposed to investigate the performance of catalysts in high reaction temperatures higher than 110 degrees Celsius (212 degrees Fahrenheit) for using cheaper feedstocks to create biodiesel.

Goodwin conducted his work using tungstated zirconia and found promising results that could lead to improved systems for economically generating biodiesel from high FFA greases and animal fats. He has completed his study and submitted his final report. He generated six publications on his work that were published in *Applied Catalysis A: General, Journal of Catalysis, and Industrial and Engineering Chemistry Research*. His work was partially supported by funding from the Fats and Proteins Research Foundation through ACREC and the U.S. Poultry and Egg Association Poultry Protein and Fat Council, and from an $894,000 U.S. Department of Agriculture grant. Goodwin has sought additional funding of $2 million through the National Science Foundation for further work in this area.
After the Storm: Disaster Recovery and Employee Safety

Editor’s Note – Mark A. Lies II is a labor and employment law attorney and partner with the Chicago, IL, law firm of Seyfarth Shaw, LLP. He specializes in occupational safety and health and related employment law and personal injury litigation. Elizabeth Leifel Ash is an associate with Seyfarth Shaw, whose practice focuses on regulatory compliance and litigation, including occupational safety and health and environmental matters.

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

Hurricane Katrina, flooding in Atlanta, earthquakes in California and Haiti, and tsunamis in the South Pacific are all recent reminders of how merciless and unpredictable Mother Nature can be. Those who study climate change have predicted a surge in natural disasters in the absence of restructuring and tightening environmental policy around the globe. When and where the next disaster will strike, whether created by man or by nature, is anyone’s guess. For employers, who are obligated to keep their employees safe during working hours, disaster preparedness is critical.

This article outlines employers’ obligations to protect employees before, during, and after an emergency and offers recommendations to employers in the following areas: (1) preparing for an emergency; (2) taking action during an emergency; and (3) cleaning up and resuming business after an emergency.

Preparing for an Emergency

The Occupational Safety and Health Administration (OSHA) requires all workplaces with more than 10 employees to develop a written emergency action plan (EAP) to identify and coordinate necessary employer and employee actions during an emergency. At a minimum, the EAP must include the following elements:

- means of reporting emergencies (fires, floods, etc.);
- evacuation procedures and assigned exit routes;
- procedures to account for all employees following an evacuation;
- procedures to be followed by employees who must remain behind to attend to critical plant operations before evacuating;
- rescue and/or medical duties for employees who are assigned and trained to perform them; and
- names or job titles of people who can be contacted for more information about the plan.

In addition to these required elements, it is recommended that employers also consider including the following in the EAP:

- location of the nearest hospital or medical emergency center;
- type of alarm system used to notify employees of an emergency;
- procedures for protecting information, including procedures for storing or maintaining critical documents and records;
- location and permissible uses of protective equipment such as portable defibrillators, first-aid kits, dust masks, fire extinguishers, etc.;
- location of televisions or radios for further information during a disaster.

Ensuring the development of an effective EAP also requires the employer to train employees to understand their roles and responsibilities under the plan. When conducting this training, the employer must address literacy, language, and cultural barriers to ensure that the training is effective. Employers also must document the training.

Responding to an Emergency

Communication during an emergency is critical to maintain organization and prevent panic and injuries. For example, not all emergencies require an evacuation of the workplace. In some cases, such as flooding, storms, or the release of biological or chemical agents, staying indoors is safer for employees.

The first question most people ask during an emergency is “should I stay or should I go?” Employers can guide employees as to the appropriate course of action by having an alarm system that emits a different signal for “evacuate” emergencies than for “stay put” emergencies. Alternatively, the alarm system could be programmed to give specific verbal instructions following the initial alert. Employers must consider the needs of disabled employees (e.g., those who are hearing or visually impaired) in selecting any alarm system.

Employers should have an effective means of communicating with employees about the following during an emergency:

- whether to evacuate or stay put;
- how and where to get information about the emergency itself;
- what areas of the building to avoid;
- how and when it is safe to return to the work area; and
- how and when it is acceptable to contact family members and loved ones.

Picking Up the Pieces

Once the proverbial dust settles after an emergency, hazards to employees can still remain. For example, downed power lines in a flooded parking lot can injure or kill employees leaving the building after the storm passes.

Hazards are even greater for employees who are tasked with cleaning up after an emergency. Employees who are actually performing cleanup work after a flood, storm, earthquake, or other disaster may be exposed to one or more
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of the following hazards:
- exposure to hazardous materials such as asbestos, mold, lead, or chemicals;
- downed power lines and trees;
- heat stress;
- confined spaces;
- blood-borne diseases or other contagions such as West Nile Virus; and
- structural destabilization.

OSHA has developed specific standards to address many of these hazards. For example, OSHA’s Hazardous Waste Operations and Emergency Response standard applies to employees who are performing cleanups of hazardous waste or other hazardous materials. OSHA’s asbestos and lead standards require employers to evaluate the level of exposure to employees, provide appropriate protective equipment, and, in some cases, conduct regular monitoring of air quality in the work area.

In addition to these specific standards, other more general requirements will also come into play. For example, OSHA’s welding and cutting lockout/tagout, confined space entry, and fall protection programs may come into play, even if no OSHA standard specifically addresses the type of cleanup activity taking place. Finally, as always, OSHA’s general duty clause requires employers to provide a workplace free from recognized hazards.

Accordingly, even if no OSHA standard applies to a particular activity or hazard, employers may still face citation liability if the hazard is reasonably likely to cause serious injury or death and there is a feasible means of abatement to correct the hazard. Before allowing employees to commence any kind of cleanup work then, the employer must conduct a job hazard analysis to identify and address potential hazards.

It is important to note that even employers who hire outside contractors to cleanup after a disaster must recognize their obligations for worker safety. OSHA’s “multi-employer worksite” doctrine allows the agency to issue citations not only to the employer whose employees are actually performing the cleanup work, but also to other employers who either control the means and methods of work of the employees.

It is imperative that employers develop and implement organized and clearly communicated procedures for responding to a disaster. A well-planned and executed emergency response program will help prevent panic, thereby minimizing employee injuries and damage to property. It is recommended that employers consider the following:
- Develop an EAP that covers a wide variety of potential emergencies and gives employees clear guidance on what to do in each scenario.
- Be cognizant of hazards employees may face even after the immediate danger has passed.

- Train employees in evacuation plans and other emergency response procedures.
- Conduct a job hazard analysis and review applicable OSHA standards before assigning any employees to perform cleanup work.
- Evaluate the safety record of any independent contractor hired to perform cleanup work, including investigating the contractor’s workers’ compensation history, its OSHA logs, and its history of citations from OSHA.
Baka Passes Away

Joseph F. “Joe” Baka Jr., a long-time active member of the rendering industry and former president of Mendota Agri-Products, passed away December 5, 2009, at the age of 72.

Baka traveled extensively with Swift and Company early in his career. He was recruited by Nick Buecher and Sons to serve as general manager of its Chicago, IL, operations in the mid-1970s. Baka continued in this position under the ownership of National By-Products. In 1990, he joined Mendota Agri-Products and served as president until his retirement in 2007.

“Joe was a long-term professional manager and an esteemed leader who has devoted his career to the development of people working in the rendering industry,” said John Mahoney, Mendota Agri-Products.

Baka is survived by his wife Marilyn, three sons, one daughter, and numerous grandchildren. The family asks that any memorials be sent to the American Diabetes Association.

Darling Purchases Certain Sanimax Businesses

Darling International, Inc., began the new year by completing its acquisition of certain rendering, grease collection, and trap servicing businesses from Sanimax USA, Inc. The purchase includes facilities located in Kendallville, IN, and Cleveland, OH. In addition, Darling acquired certain Sanimax collection routes in Pennsylvania and the lower part of Michigan.

FDA Opens Mexico City Office

As part of its continuing effort to bolster food and medical product safety in the United States by working with its regulatory partners overseas, the Food and Drug Administration (FDA) has opened a Mexico City office, the agency’s third post in Latin America and its tenth internationally in the past 13 months.

“The opening of this office represents an important step as we re-design our product safety strategy,” said FDA Commissioner Dr. Margaret A. Hamburg. “We, like our partners in the Mexican government, realize that prevention is the key. For example, more than a third of the fresh fruits and vegetables we eat come from Mexico as do a large amount of our medical devices. Having FDA experts located permanently there will be mutually beneficial to both our countries and respective citizens.”

Staff assigned to the FDA’s Mexico City post will work with their counterparts in the Mexican government to harmonize regulations and guidance standards and to work on other collaborative initiatives. These collaborations will include, for example, information-sharing on the respective regulatory systems and joint workshops on the safety of food and medical products. Agencies in both governments also will make efforts to find opportunities for joint training on food-borne illnesses and the oversight of food traded internationally.

FDA staff also will offer collaboration on the use of the latest laboratory techniques, foster other collaborative initiatives to ensure the safety of food and medical products marketed in the two countries, and be a portal to the FDA for counterpart Mexican agencies and the U.S. export industry in Mexico.

To date, FDA has opened 10 international posts, including stations in China, India, Europe, and Latin America. The other offices in Latin America are located in Santiago, Chile, and at the FDA’s Latin America Office headquarters in San José, Costa Rica.

John Morrell to Close Iowa Plant

John Morrell and Company, a subsidiary of Smithfield Foods, Inc., will permanently close its hog processing and fresh meat fabrication plant located in Sioux City, IA, April 20, 2010. The plant processes hogs and produces boneless loins and other fresh pork products. The closure will affect approximately 1,450 hourly and salaried employees.

According to John Morrell President Joseph B. Sebring, the Sioux City plant is one of the oldest, most outdated, and least efficient plants in the Smithfield system.

“The Sioux City plant was constructed in 1959 and would require significant capital expenditures to outfit it with the next generation of pork processing technology,” Sebring said. “In this adverse business environment those capital needs simply cannot be met.” He added that the plant’s refrigeration system is antiquated and inefficient and the facility lacks any significant refrigerated storage space.

The company said that three other Smithfield plants – located in Sioux Falls, SD, Denison, IA, and Crete, NE – have the capacity to partially absorb the number of hogs that are currently being processed at Sioux City and that it will transfer some of the Sioux City production to those plants in the near term. Smithfield added that it has no further plans for plant closures in the foreseeable future.

JBS Finalizes Purchase of Pilgrim’s Pride

In late December, JBS S.A. became a majority owner of Pilgrim’s Pride Corporation, which emerged with six of its subsidiaries from chapter 11 bankruptcy protection 13 months after filing. Under the terms of the bankruptcy plan approved by the court at the end of 2009, the reorganized Pilgrim’s Pride issued 64 percent of its common stock to JBS USA Holdings, Inc., a subsidiary of JBS S.A., in exchange for $800 million. The remaining 36 percent of the common stock was issued to stockholders existing immediately prior to the effective date of the plan. Proceeds from the sale of the stock of the reorganized Pilgrim’s Pride are being used to fund cash distributions to unsecured creditors.
According to a filing at the U.S. Securities and Exchange Commission, Wesley Mendonca Batista, chief operating officer of JBS S.A., has replaced 81-year-old Lonnie “Bo” Pilgrim as chair of the board of directors of Pilgrim’s Pride. Pilgrim will remain a member of the board, but the filing stated that Lonnie Ken Pilgrim, the company’s vice president, and Richard Cogdill, its chief financial officer, have been removed.

Also as part of its integration with JBS USA, Pilgrim’s Pride has eliminated approximately 230 corporate and administrative positions across the organization. About 160 of the primarily salaried and salaried non-exempt positions being eliminated are based at the company’s headquarters in Pittsburg, TX, or in nearby Mt. Pleasant, TX. The remaining positions are spread over nearly a dozen other sites, including Atlanta, GA, Dallas, TX, and Broadway, VA. The company will provide severance benefits to affected employees. The company stated there is no direct impact on Pilgrim’s Pride’s operations or production.

In addition, the company said it is moving forward with plans to consolidate most corporate functions at JBS USA’s headquarters in Greeley, CO.

New Leader for University Poultry Programs

Michael T. Kidd has been appointed director of the Center of Excellence for Poultry Science and head of the Department of Poultry Science. He previously was head of the poultry science department at Mississippi State University.

The center is a multidisciplinary unit of the statewide University of Arkansas Division of Agriculture. As center director, Kidd will provide leadership for multidisciplinary research and extension programs in poultry science and related disciplines. As department head, he will be responsible for academic programs in poultry science within Dale Bumpers College of Agricultural, Food, and Life Sciences on the Fayetteville campus, which offers bachelor’s, master’s, and doctoral degree programs in poultry science.

A native of El Dorado, AR, Kidd has bachelor’s and master’s degrees from the University of Arkansas in poultry science. His doctorate is from North Carolina State University, with a major concentration in nutrition and a minor in immunology.

After receiving his doctorate in 1994, Kidd became research manager at Nutri-Quest, Inc., in Chesterfield, MO, later being promoted to research director in 1998. He joined the Mississippi State faculty in 1999 and has led the poultry science department there since 2007. He is recognized as an authority on amino acids in poultry nutrition and has published extensively on the impact of nutrition on immune responses of birds. Kidd has published over 300 scientific articles.

USDA Launches Help Desk for Small Processors

The U.S. Department of Agriculture’s (USDA’s) Food Safety and Inspection Service (FSIS) has opened a new small plant help desk, which will provide operators of small and very small meat, poultry, and processed egg products establishments seeking help with agency requirements with direct access to knowledgeable staff specialists. The help desk also will provide assistance to state and local food regulatory agencies.

The FSIS small plant help desk will serve as a “one-stop shop” for plant owners and operators with questions.

More than 90 percent of the 6,000 plants inspected by FSIS are small or very small. FSIS staff will assess callers’ requests and provide information and guidance materials that best meet their needs. In situations where the answer is not readily available, the staff will research the issue and follow-up with the caller. As appropriate, the help desk will provide a portal to other services, such as AskFSIS, FSIS’ existing Internet service offering official agency responses to inquiries on agency policy.

Inquiries can be made to the small plant help desk by toll-free telephone or by e-mail. The help desk is open from 8:00 a.m. to 4:00 p.m. Eastern Standard Time, Monday through Friday, excluding federal holidays, at (877) 374-7435. The help desk is also available by e-mail at infosource@fsis.usda.gov.

Have an interesting article idea, or interested in writing an article to be included in a future issue of Render?
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February 2010


Pacific Coast Renderers Association 78th Annual Convention, February 18-21, Indian Wells, CA. Contact Jeanette Canto at (415) 441-2121, or e-mail caitosf@mcn.org.


March

Aquaculture 2010, March 1-5, San Diego, CA. Log on to www.was.org.


National Grain and Feed Association 114th Annual Convention, March 3-5, Maui, HI. Log on to www.ngfa.org.


World Biofuels Markets, March 15-17, Amsterdam, the Netherlands. Log on to www.worldbiofuelsmarkets.com.

Brazilian Expo Render, March 25-26, Sao Paulo, Brazil. Log on to www.fenagra.com.br.

April

Global Feed and Food III Congress Mexico 2010, April 20-23, Cancun, Mexico. The National Renderers Association and World Renderers Organization will be participating and offering a breakout seminar. Log on to www.globalfeed-food.com/english/index.html.

National Renderers Association (NRA) Spring Meeting, April 27-29, Cincinnati, OH. E-mail NRA at renderers@nationalrenderers.com.


May


Australasian Aquaculture 2010, May 23-26, Hobart, Tasmania. Log on to www.was.org.

June


National Renderers Association Central Region Convention, June 9-11, Green Lake, WI. Contact George Kaluzny at (815) 744-1453, or e-mail goynzulak@aol.com.

World Pork Expo, June 9-11, Des Moines, IA. Log on to www.worldpork.org.

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

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that world biofuels production in 2009 has reduced global GHG emissions by 123.5 million tons, representing an average reduction of 57 percent compared to the emissions that would have occurred from the production and use of equal quantities of petroleum fuels.

Of note, the report found:

- World biofuels production has surpassed 100 billion liters (26.4 billion gallons) of annual production in 2009. After accounting for energy contents, this is displacing 1.15 million barrels of crude oil per day, which creates approximately 215 million tons of GHG emissions annually.
- For 2009, world biodiesel production forecasts of 16.4 billion liters (4.3 billion gallons) reduced GHG emissions by 35.9 million tons – greater than the GHG emissions reported for Croatia in 2007 (see Table 2 on page 15).
- The combined GHG emissions reduction from global ethanol and biodiesel production of 123.5 million tons is equal to the national GHG emissions of Belgium or Greece.

The study utilized a life cycle assessment approach to estimate global GHG emissions reduction achieved through the production and use of biofuels from “cradle-to-grave,” including the acquisition of raw material, manufacture, transport, use, maintenance, and final disposal.

The full study, entitled “GHG Emission Reductions from World Biofuel Production and Use,” can be downloaded at www.globalrfa.org. The report was commissioned by the Global Renewable Fuels Alliance. R

**Europe Funds Animal Disease Programs**

The European Commission (EC) has earmarked 275 million Euros (€) to support programs to eradicate, control, and monitor animal diseases in 2010, up from €186.5 million last funded for 2008. The 224 annual or multi-annual programs that were selected for European Union (EU) funding will tackle animal diseases that impact both human and animal health. The large EU contribution reflects the high level of importance attached to disease eradication measures, for the protection of both animal and public health.

“The motto of our animal health strategy is ‘prevention is better than cure,’” said EU Health Commissioner Androulla Vassiliou. “If the spread of certain animal diseases is not prevented, it can affect both animal and public health. That is why we are prioritizing programs covering diseases that might be transmitted to humans.”

Each year the commission approves programs for the eradication and monitoring of animal diseases and transmissible spongiform encephalopathies (TSEs), for the control of zoonoses such as *Salmonella*, and for avian influenza surveillance. These approved programs receive financial contributions from the EU.

**Animal Disease Eradication Programs**

For 2010, 76 annual or multi-annual programs to eradicate 10 animal diseases have been granted a total EU contribution of around €174 million. The increased budget is due to allocations to counter bluetongue disease in many member states and the approval for the first time of a bovine tuberculosis eradication program for the United Kingdom, with the EU providing €12 million for Ireland, €10 million for the United Kingdom, and €7.5 million for Spain.

Diseases that might be transmitted to humans are prioritized with significant sums being spent on the eradication of brucellosis, tuberculosis, and rabies. Following the success of the programs in recent years that have virtually eradicated rabies in the western part of the EU, most of the activity in 2010 will be focused toward the member states on the eastern border of the EU, with almost €12 million allocated to this task. The programs aim at producing immunity in wildlife by orally vaccinating them with baits containing vaccine.

**TSE Programs**

The overall trend for TSEs is positive and improving year after year due to good implementation of the monitoring and eradication programs in most member states. The commission has agreed to make €67 million available from the EU budget to assist member states in the compulsory monitoring of TSEs, and for bovine spongiform encephalopathy (BSE) and scrapie eradication measures. Requests from member states for BSE eradication (i.e., culling of cohorts of BSE infected animals) have dropped in line with the reduction in new BSE cases. The second year of the special multi-annual program for scrapie eradication submitted by Cyprus is included and over eight million Euros has been allocated as foreseen.

**Zoonoses Control Programs**

*Salmonella* programs have further expanded in 2010 with the inclusion of activities in turkey farms (now turkey, broilers, layers, and breeders are covered). Historically, the use of *Salmonella* funds has been difficult to predict and have often been underused as a large part of the cost depends on the slaughter of infected flocks, whose value varies considerably depending on the stage of production. A financial contribution of €26 million has been allocated to control zoonotic *Salmonella* in poultry and turkey flocks in 25 member states.

**Avian Influenza Surveillance**

Member states will also continue surveillance for avian influenza in poultry and wild birds in 2010 with financial assistance from the EU of more than four million Euros towards laboratory testing and wild bird sampling costs. This surveillance is the most effective way to detect early outbreaks of both high and low pathogenic influenza and was extremely useful in previous years, allowing early detection of avian influenza in wild birds before commercial flocks became infected. R
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ADVERTISER INDEX
Ameri-Pac, Inc. .......................................................... 25
Amaffi Ingredients .................................................. 12
Baker Commodities, Inc. ................................ Back cover
BDI-BioDiesel International ................................ Inside front cover
C.A. Picard, Inc. ..................................................... 9
Centrisys Centrifuge Systems ................................ 17
Dupps .................................................................. 2
Dupps .................................................................. Inside back cover
Flottweg Separation Technology, Inc. ........... 13
Haarslev, Inc. .......................................................... 1
Industrial Steam ..................................................... 5
Kastoion ................................................................ 23
Lantec Products, Inc. ........................................... 5
Martin Sprocket & Gear, Inc. ............................... 27
Onken, Inc. .......................................................... 3
Par-Kan Company ................................................ 21
Redwood Metal Works ......................................... 19
Scaffidi ................................................................ 29
Travis Body & Trailer, Inc. .................................... 7
Walinga Engineered Transportation Equipment .. 15

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