



Rendering Circles

A newsletter produced by the Australian Renderers Association Inc.

NO. 23—May 2011

Australian Renderers Association Inc.
PO Box 390, Baulkham Hills NSW 1755

Telephone: +612 9686 3119
Facsimile: +612 9686 3303

Email: gsbanks@ozemail.com.au
Web: www.ausrenderers.com.au

2011 International Symposium

Plans for the 2011 international symposium are in place and the ARA is looking forward to one of its best symposia to date. The venue is the purpose built Sydney Convention and Exhibition Centre at Sydney's Darling Harbour. The conference facilities are an excellent match for the quality of speakers on the program. To top off the great venue and program, the social program includes a harbour cruise to the symposium dinner function at Doltone House at Darling Island Wharf.



There has been exceptional interest from exhibitors who will be taking up booths at the symposium and from sponsors who are backing the event.

The ARA has set up a special web site at www.arasymposium.com.au. Visit the website to see all the details and to register on-line and make hotel bookings.

As with all ARA symposia, the focus is the quality of the program. For the 2011 symposium there are sessions on the outlook for international markets for tallow and meat meal, rendering technologies, investments in rendering and environmental solutions.

Some of the program highlights are:

The keynote speaker is Dorab Mistry. Dorab is one of the most influential players in global fats and oils markets and is regarded as a leading an-

alyst of price behavior of fats and oils. His company, Godrej International has wide ranging interests in oil processing, animal feeds, oleo-chemicals, soaps and other oils-related business.

Frank Ji of Gardner Smith, China and Jan de Roover of Oleon will expand the international perspective for tallow markets by talking about tallow markets in China and Europe. Mark Caddigan from Bakels, NZ will compliment the market focus on tallow with a presentation about technical aspects of tallow for further processing.

Meat meal also gets a place on the program. George Schinard from Gaviolon will discuss the changing environment for marketing meat meal in Australia's traditional export markets and Mike Rodey of AFB International will discuss the technical requirements for value adding to meat meal for pet food applications.

A theme of the symposium is investing in rendering. Erica Weltzein from Rothsay Canada will discuss strategies for investing in quality, product development, equipment and business expansion. Cam Wilkinson from A.J. & Sons (Manufacturers) is going to explore opportunities for investments in cost control and environment manage-



Dorab Mistry



Erica Weltzein

ment. Alexandre Ferreira from will talk about new investments in rendering in Brazil and Heather Brodie of the Biofuels Association of Australia will explain the impact of the international push for biofuels on rendering.

The program includes a snapshot of some of the innovations that Australian renderers have implemented to improve efficiencies and safety. These presentations include mill design to reduce fire hazards, continuous measurement of meat meal flow, real time monitoring of rendering costs and production and ideas for reduced energy use.

With environmental issues high on the agenda for all renderers, the program includes important presentations about the generation and use of biogas and the opportunities for the recovery and use of waste heat.

Please visit the web site www.arasymposium.com.au to find all the news about the symposium and make your bookings. An added attraction is that the Sydney boat show will be at Darling harbour at the same time as the symposium - so get in early with registrations and accommodation bookings.

From the President



My main message for this issue of Rendering Circles is short and sweet: **Check out the ARA's symposium website and register for the Symposium.** Just as important is thanks very much to Dennis King for making the website possible.

Of course I have a few other things to say but don't forget the symposium!

At the end of March ARA Directors met with Steve Martyn of AMIC to discuss issues of mutual concern. The main topic of conversation was the proposed carbon tax. AMIC has a Climate/Emissions Trading Committee that develops AMIC policy to be put to government. The government is not prepared to tell us what it has in store by way of a carbon tax but based on the previous Rudd government's plans for a carbon pollution reduction scheme, AMIC's position on carbon tax may not be the same as the rendering sector. This is because under the defunct CPRS, the meat industry would not have qualified for subsidies as an energy intensive export industry. If rendering is considered in isolation, it could have qualified as an EITE at the level that was to attract a 60% free issue of permits to emit greenhouse gases and this could have been worth \$5 to 6 million to rendering plants. The ARA opposes a carbon tax but has not formulated a detailed strategy because we do not know what the government has in mind. There is talk of protection for energy intensive export industries and if there has to be a tax, the ARA is looking at developing the arguments that ensure that rendering is seen as trade exposed. I have written to the Department of Climate Change to explain the position of renderers in relation to a carbon tax and to request further consultations.

We also met with Phil Franks and David Doral of MLA. We had similar discussions about what synergies are available when it comes to negotiating with government about the carbon tax.

Immediately before the next ARA meeting in May, I will be taking the opportunity to meet with other organisations in Canberra to make sure that ARA issues remain on people's radar. Graeme has arranged an itinerary for me and other Directors to meet with DAFF, AQIS, the Sheepmeats Council of Australia, Cattle Council of Australia and Aus-

tralian Pork Limited. We will also meet with Duncan Rowland of Animal Health Australia

A pressing issue for the ARA is access for animal feed, including meat and bone meal to China. In 2010 China was the biggest export market for Australian MBM and it is important to maintain market access. Rendering establishments that want to export to China must be registered with the Ministry of Agriculture. This involves submitting documentation and product samples and can be a lengthy process. Registration is not facilitated by the ARA or AQIS but agents can assist. The ARA has recently provided AQIS with a list of issues related to the difficulties of registering with the Chinese MOA.

In 2009 AQIS was informed that establishments would also have to be registered with the AQSIQ. AQSIQ is responsible for quarantine and border protection in China and registration with this department would be separate to and in addition to registration with the MOA. The new regulations involve inspection of rendering establishments by AQSIQ. Other methods of registration can be considered and the ARA is working with AQIS to expedite registrations.

There is a concern that requirements for registration with AQSIQ could be introduced without an introductory period and this could interrupt export. The ARA has asked AQIS to initiate discussions with AQSIQ about how rendering plants could be registered before any change in requirements occurs and trade can continue uninterrupted. At the moment it is not clear how inspections will be conducted and what the inspectors would be looking for. The Australian embassy in Beijing is trying to find out what regulations apply to rendered products used for animal feed in China and ARA members who are involved in trade to China have made enquires through their agents and contacts.

The other market access issue that remains on the boil is access for poultry meal and digest to Japan. Since the Japanese delegation inspected poultry rendering and digest plants in December a few points have been clarified. In particular Japanese authorities have agreed that liquid poultry digest can be part of the protocols for the import of poultry meal. We are still waiting for an official report of the reviews carried out last December and the ARA has not pushed for a response because the recent disasters in Japan have no doubt dropped the issue of imports of poultry meal down the list of priorities.



KEITH ENGINEERING (AUSTRALIA)

PROUD SPONSORS OF THE 2009 CAIRNS ARA SYMPOSIUM

- Continuous Cookers
- Screw Presses
- Hammer Mills
- Batch & Disk Cookers
- Pre-hogs
- Raw Material Systems
- Blood and Feather Cookers
- Complete Rendering Plants



36 McPherson St, BANKSMEADOW
SYDNEY NSW 2036
PO Box 149 MATRIVILLE NSW 2036
Ph: 02 9316 9042
Fax: 02 9316 8717
Email: keitheng@bigpond.com
Web: www.keitheng.com

People in Rendering



Craig Palmer

Craig Palmer has rendering in the blood. His experience in the industry goes back to when he worked in the family company's edible fats rendering business at Preston when he was 12 years old. He admits to being passionate about rendering and this drew him into being President of the ARA from 2008 to 2010. Before he stepped up to be President, Craig had been a director of the ARA for six years.

Craig prepared for his career as a full-time renderer by studying for a BSc degree in applied mathematics at La Trobe University. After Uni, Craig joined the family business, Australian Tallow Producers which operated a rendering plant in Preston Victoria. In 1995 ATP acquired the Alba Oils Refining business in WA and in 1998 ATP bought the Sibinvest rendering plant at Brooklyn. At this time Craig managed the ATP side of the business and had stepped back from involvement with the oil refining business.

When Australian Tallow Producers took over, the Brooklyn plant was processing 5 tonne per hour of raw material through one line. Since then, Craig has replaced the original processing line and has added four other processes. ATP now has the capability to separately render poultry and ovine materials, produce blood meal and hydrolysed feather meal and to hydrolyse woolly material. The capacity of the establishment has increased from 5 tonnes per hour to 25 tonnes per hour.

Apart from expanding the product range and total capacity Craig has proved to be an innovative renderer and has introduced new technologies to control costs and product quality. Examples of his innovations are air-cooled condensers to reduce water use, and a covered anaerobic lagoon to capture methane from the waste water. The methane will be used as a fuel source for the boilers and for the proposed cogeneration plant. Recently a fully automated continuous feather hydrolysing and drying system was installed and commissioned along with two new biofilters.

While ATP was expanding, Alba Oils went from a batch refining plant to a continuous neutralising, bleaching and deodourising plant for refining edible vegetable oils and animal fats. The new plant has a capacity of 100 tonne

per day. Although Craig's main concern is Australian Tallow Producers he also contributes to the success of Alba Oils which is managed by his brother Ashley.

During his time as President of the ARA, Craig did a great job in fostering the ARA's relationships with other agencies and industry associations, particularly AQIS. His work with AQIS led to the reopening of the Philippines market for meat meal. He made important progress towards getting access for poultry meal and digest in Japan. Access to Japan might have happened during Craig's presidency if an FMD outbreak had not occurred in Japan and diverted resources. Craig also made sure that organisations such as the Cattle Council of Australia, Animal Health Australia, the Stock food Manufacturers Council of Australia, Australian Pork Limited and MLA were kept in touch with ARA activities. He also opened relationships with the Sheepmeats Council of Australia and gave presentations to explain the contribution that rendering makes to the profitability of sheepmeat production.

The work with AQIS and contact with other groups was a continuation of the relationship building of Craig's predecessor's Andy Bennett and Paul Stenzel. Craig was a member of the ARA executive with Paul for six years and is quick to acknowledge Paul's contribution. In particular he points out that Paul started the work with AQIS to open the Philippines market and was active in deflecting the market access threats that are never-ending and take up so much of the ARA President's time on behalf of members.

Craig stepped down as President of the ARA in 2010 because of the pressures of his rapidly expanding rendering business. His message to renderers is "get involved with the ARA". The ARA works for members on many fronts and all members can make a contribution to the Association to help build the future of a cohesive Australian rendering industry.

Craig and his wife Kerrie have four children, two boys and two girls and one grandchild. Craig has inveigled his younger son, David, into the rendering industry and David is now production manager at the ATP Brooklyn site.

AQIS Rules

AQIS has successfully negotiated new market access conditions for meat and bone meal in Malaysia based on production of MBM in compliance with the Australian Standard for the Hygienic Rendering of Animal Products. Malaysia is an important market for Australian meat and bone meal and accounts for about 7% of exports. The clarification of market access requirements should help facilitate this export trade.

There has been some clarification of the unofficial report of the Japanese delegation that reviewed poultry meat meal and digest plants last December. AQIS has written to the Japanese MAFF requesting several clarifications and it is expected that contrary to earlier reports, liquid poultry digest will be included along with meat meal in protocols for access for animal feed materials. We expect to see some other clarifications in the final report of the review.

AQIS is working with the ARA in relation to access for meat meal into China. Currently establishments have to be registered with the Chinese Ministry of Agriculture if they want to export animal feeds to China. AQIS has been informed that establishments will also have to register with the Chinese. AQSIQ is the Chinese quarantine

authority and is responsible for border protection. Registration with AQSIQ will be in addition to registration with the MOA. AQSIQ has indicated that registration will involve an audit but that other methods of registration can be considered. AQIS is working with the ARA to resolve uncertainties and will discuss the issue with AQSIQ in late June at the high level SPS dialogue in Beijing.

AQIS has also asked ARA members to provide comments about the process of registering with the MOA. AQIS will be having discussions with the MOA to facilitate the registration process.

Steve Tidswell, an AQIS Field Operations Manager has recently audited the ARA's systems for recommending listing of rendering plants for export access. Steve's report has been provided to the ARA and long-suffering rendering plants that are audited by the ARA auditors will be interested to hear that the ARA was issued with one corrective action request. Steve's audit was part of a regular program of audits of the ARA by AQIS and was an important activity in preparing for the expected EU review of animal by-products processing later in the year.



Centrifuge Engineering
ACN 083241614
ABN 47083241614

G-TECH SEPARATION PTY LIMITED
14A NICHOLAS DRIVE,
DANDENONG VIC. 3175

Ph 03 9768 3866
Fax 03 9768 3711
Email: salesgtech@bigpond.com
Email: sales@gtech-bellmor.co.nz
Web: www.gtech-bellmor.co.nz



G-TECH BELLMOR

MANUFACTURERS OF CENTRIFUGES, PUMPS, GRINDERS AND MIXERS.
PARTS & SERVICE FOR THE RENDERING INDUSTRY

Member of ARA



Head Office:
21 Empire Road, Belfast, Christchurch, NEW ZEALAND Ph: +64 3 323 6151 Fax: +64 3 323 6152

Accreditation Workshops

The ARA workshop on Hygienic Rendering of Animal Products was held for the first time at the University of Queensland at Gatton in February. There were doubts about whether the workshop could go ahead after the devastating floods in the Lockyer Valley in January but staff at the Gatton campus of the University of Queensland did an excellent job of preparing for the workshop.

One of the concerns about shifting the workshop from the University of Western Sydney to Gatton was whether the standard of microbiology demonstrations could be maintained. The microbiology work at the workshop has been organised by Julie Markham of the University of Western Sydney for almost twenty years and Julie has done a mighty job for the ARA. The microbiology work was prepared by Bob Englebright at Gatton and the practical work and demonstrations went off without a hitch. In recognition of The University of Queensland's support of the workshop, the ARA has contributed \$2,000 to scholarships for two students at the university.

The February 2011 workshop was the 26th and brought the number of accredited people to 702. There was a strong AQIS presence at the workshop and senior AQIS Veterinary Officers Jason Ollington and Maurie Malony jointly topped the exam results with Joseph Garcia also from AQIS close behind. Rodney Crighton of Oakey abattoir did best out of the renderers with Bill Sauer of JBS Australia, Rockhampton and Ian Missingham of Peerless Holdings also doing very well.

As usual, ARA members made valuable contributions to the workshop. David Kassulke and the team at A.J. Bush & Sons (Manufactures) hosted a visit to the plant at Beaudesert and provided the best catering of the week. The regular contributors to the workshop, who are mostly Sydney based, made their way up to Gatton. Rick Carter of Kemin Australia gave a talk on Salmonella inhibitors and antioxidants, Bill Trollope of Keith Engineering gave a presentation about screw presses and Warwick Rush of Gardner Smith gave a talk about tallow quality. Warwick was ably assisted by his driver Toby Escott. Clare Jones of AQIS also traveled to Gatton to explain AQIS' role in negotiating market access and verifying that export requirements are complied with.

In view of the success of the workshop the facilities at the University of Queensland, Gatton have been booked for another workshop in February 2012.



The 2011 Rendering Workshop at A.J. Bush & Sons (Manufactures), Beaudesert



Paul Minnikin of JBS Australia Beef City



Maurie Maloney and Jason Ollington of AQIS



Neil Cook of Southern Queensland Exporters and Dave Coleman of Peel Valley Exporters



Paul Martin of Auspac, Mark Paterson of Primo Port Wakefield and Garry Gale of Bindaree Beef



Gardner Smith Pty Limited Level 13, 61 Lavender Street Milsons Point NSW 2061
(02) 9965 5900 www.gardnersmith.com

People and Places

ARA director Tim Juzefowicz is one of Australia's leading rowers in the Masters categories. Tim has represented Australia at world championships where he has won gold medals.

In his latest event Tim placed third in the single sculls at the NSW Masters championships at the Penrith Olympic rowing venue. This was in preparation for the big event, the Victorian Masters on 21 May.

Toby Escott has been inspired by Wills and Kate and has announced he will be getting married to Wendy Goodwin on 23 July. Toby and Wendy have known each other for many years. The ARA wishes Toby and Wendy a great day in July and every happiness for the future. The question is: will the happy couple spend the honeymoon at the symposium?

The sale of Camilleri Stockfeeds to Ridley Agriproducts has been completed and Bradley Hopkins is now the General Manager of Camilleri Stockfeeds. Bradley has been with Ridley since September 2009 as National Purchasing Manager. Previously he was with Bartter Enterprises with responsibility for the rendering division.

Russell Wood has joined A&S Thai Works as General Manager based in Bangkok. Director Terry McKenna said that Russell's long-standing knowledge of the Australian ren-



Tim Juzefowicz at the NSW Masters

dering industry will allow ASTW to further develop business in Australia and Asia with a focus on energy-efficient rendering.

Meat & Livestock Australia has a new Managing Director. The current MD, David Palmer retires on 1 July and Scott Hansen will take over. Scott is MLA's Regional Manager for North America and is a former Executive Director of the Victorian Farmers Federation Pastoral Group and Sheepmeats Council of Australia.

Moisture and Microbial Growth

Moisture control is the principle of preservation of animal protein meals. Moisture control is also the method of preservation of many food products and because of this there is extensive knowledge of how much moisture is needed to support the growth of microbes. However, microbiologists consider the portion water available for microbial growth in foods rather than the total amount of water. This is because some of the water in a food can be made unavailable to microbes by addition of salt, sugar or humectants such as glycerol. The term water activity is used to express how much water is available for microbial growth in a food and different microbes are characterised by the minimum water activity at which they grow.

Water activity is not usually a relevant characteristic of animal protein meals. Total water content is the important specification for meat meal and in most cases the product water content is well below the requirements for microbial growth. However there could be circumstances where there is enough water associated with a meal to allow microbial growth. In view of this, Rendering Circles has investigated the water content of animal protein meals and the corresponding water activity. Relationships about water content and water activity may not hold for all meals because as mentioned, water activity is not just about water content, it takes into account solutes and could be affected some of the molecular constituents that naturally occur in meals. However knowledge of the water content of meals and the corresponding water ac-

(Continued on page 7)

Is BSE Over?

In January the respected popular science magazine New Scientist ran a story titled "Curtain falls on mad cow disease". It may be an exaggeration to say that we have seen the last case of BSE but New Scientist said that in 2010 there were 17 new cases worldwide (the OIE reports 44 cases of BSE in 2010 according to date of confirmation). This compares with over 37,000 cases in the UK at the peak in 1992. New Scientist says that BSE is almost extinct although more cases of the human equivalent vCJD may be waiting in the wings.

The first confirmed case of BSE occurred in 1984 and the first case of vCJD was in 1995, ten years after the UK government banned the sale of meat components likely to contain prions. To date there have been 175 deaths from vCJD in the UK. James Ironside of the CJD Surveillance Unit in Edinburgh said "It is an abiding mystery why so few people succumbed, even though almost the whole population was probably exposed to infected brain

and nervous tissue in beef before the disease was discovered". In theory only a small number of mutated prions are required to trigger a spongiform encephalopathy disease but it appears that it is difficult for prions from one species to influence those of another and the barriers for transfer from cows to humans were quite high according to Chris Higgins, Chairman of the UK's Spongiform Encephalopathy Committee. There also appears to be a genetic barrier to whether people are susceptible to vCJD. There are three genetic variations of the human prion protein and cases of vCJD have all been in people with the variant designated MM. This variant is restricted to 37% of the population. However based on experience of kuru, another spongiform encephalopathy disease that occurs in PNG, it is possible that people with other genetic variants of prion protein may develop vCJD at a later age. In this case, a second wave of the disease could occur although there is no sign of this at the moment.

Timeline of BSE and vCJD

1986	BSE Recognised as new disease
1989	UK introduced ban on feeding ruminant material to ruminants
1992	Peak year for BSE with over 37,000 cases in the UK
1995	First human deaths from vCJD
1996	Link between BSE and vCJD acknowledged
1996	Australia adopts voluntary ban on feeding ruminant material to ruminants
1997	All Australian states and territories introduce legislation to ban feeding ruminant material to ruminants
1999	All Australian states and territories introduce legislation to ban feeding mammalian material to ruminants
2001	All Australian states and territories introduce legislation to ban feeding all animal material to ruminants
2001	First case of BSE in Japan. Thirty-six cases to date
2003	First non-imported case of BSE in Canada. Nineteen cases to date
2005	First case of BSE in the USA. Two cases to date
2010	Forty-four new cases of BSE world-wide
2011	Five new cases world-wide to April
2011	Total of 182 cases of vCJD world-wide since 1995; 175 in UK

(Continued from page 6)

tivity will give an idea of what water content will support the growth of different microbes in animal protein meals.

Rendering Circles tested the water activity of a range of different meals including meat meal, poultry meal, feather meal and blood meal at different water contents from 5% to 70%.

Meals with water contents of 5 to 7.7% had water activities of 0.26 to 0.4. (The water activity scale runs from 0 to 1 with 0 meaning bone dry and 1 pure water). No microbes can grow at these water activities.

For water contents of 10 to 12%, the corresponding water activity is 0.5 to 0.67. A few specialised moulds can grow at water activities close to 0.6 so there is a risk that meals at about 12% could become mouldy.

At 20 to 25% moisture the corresponding water activity is 0.7 to 0.83. Most moulds can grow at water activities above 0.8 including the toxin producing moulds.

Most bacteria can only grow at water activities above 0.9 and Salmonella, the main organism of concern for renderers, does not grow below a water activity of 0.94. In animal protein meals the moisture content has to reach 70% before a water activity of 0.94 is achieved. Meal at 70% moisture is very sloppy but is not at the stage where water is dripping from the mixture.

This means that while salmonella can grow in meal handling equipment where there is free water, e.g. in drops of condensation, the bacteria are unlikely to grow in damp or pasty meat meal unless the meal is so wet that it is sloppy enough to run down surfaces.



PROVEN COMMITMENT TO THE RENDERING INDUSTRY

Salmonella control
with SalCURB® for:
plant hygiene &
meal decontamination

Oxidation control
in fats, oils & meals with:
Rendox™
Termox™ & Naturox®

Call to obtain a copy of the 'Rendering Plant Salmonella Control Programme' booklet

Kemin (Aust.) Pty. Ltd. Tel: 02-94822357 & Fax: 02-94821837

®™ Trademarks of Kemin Industries, Inc., U.S.A.

Near-Infrared Testing of Meat Meal

Analysis of rendered products by near-infrared (NIR) reflectance spectrometry, especially meat and bone meal, has been around for many years. It is a very rapid method of simultaneously measuring the protein, fat, moisture, ash and fibre content of MBM. A disadvantage of this type of analysis when applied to meat meal is that the grind or particle characteristics of samples can affect results. The early generation instruments work by measuring the near-infrared energy reflected from the surface of a sample in a relatively small sample cup. As a result, any change in the size, shape and distribution of particles in the sample of meat meal will affect the reflectance properties and the reliability of results.

New generation NIR spectrometers such as the SpectraStar supplied by Unity Scientific Asia Pacific provide results that are more reliable. Craig Hunt explained how using a larger sample cup, continuously rotating the sample during analysis and employing a sophisticated averaging system minimizes problems commonly associated with heterogeneous samples such as meat meal.

Results for moisture, fat, protein, ash and fibre content in meat meal samples can be obtained in about 40 seconds. Starter calibrations are also available for other rendered

products such as blood meal, feather meal, fish meal and poultry meal. Results of analyses are stored in a c.s.v. file format along with the relevant sample information. The c.s.v. file can be easily imported into Excel to generate production reports with traceability between sample results and production lots.



All renderers are interested in supplying their customers with products that comply with specifications, particularly if meat meal is supplied as an added-value specialty product for uses such as pet food and aquaculture feed. NIR analysis provides renderers with a quick, robust and traceable method to confirm products meet specifications. Unity Scientific Asia Pacific will have the SpectraStar NIR analyzer on display at the ARA Symposium and renderers should check out the equipment and find out what it can do for them.

meat meal analysis as easy as 1-2-3

1. Quick start with pre-loaded calibrations
2. No sample preparation
3. Quality control with traceability

Protein ■ Fat ■ Moisture ■ Ash ■ Fibre



Available from:
Unity Scientific Asia Pacific
www.MeatandBoneMeal.com
E: sydney@unityscientific.com.au
P: 0247399057

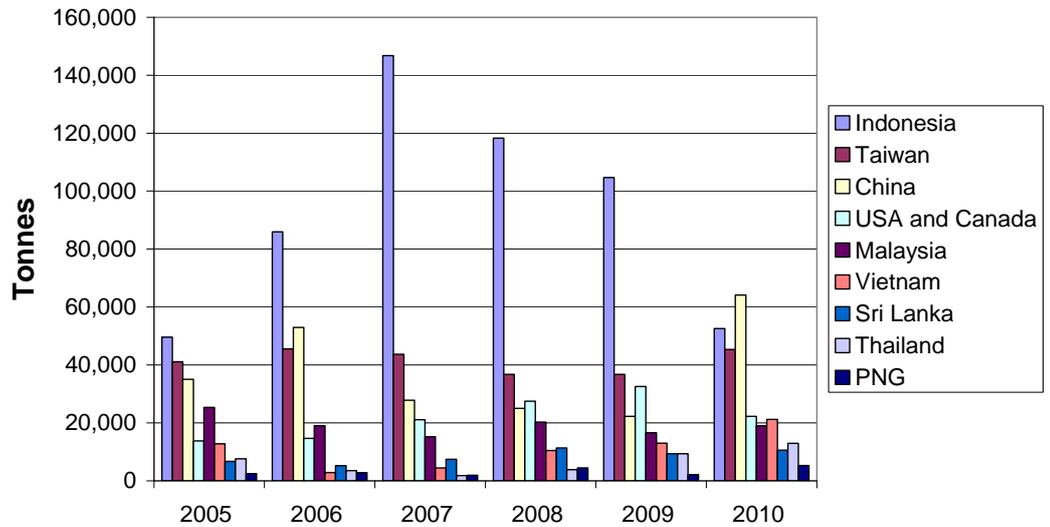


Tallow and Meat Meal Exports

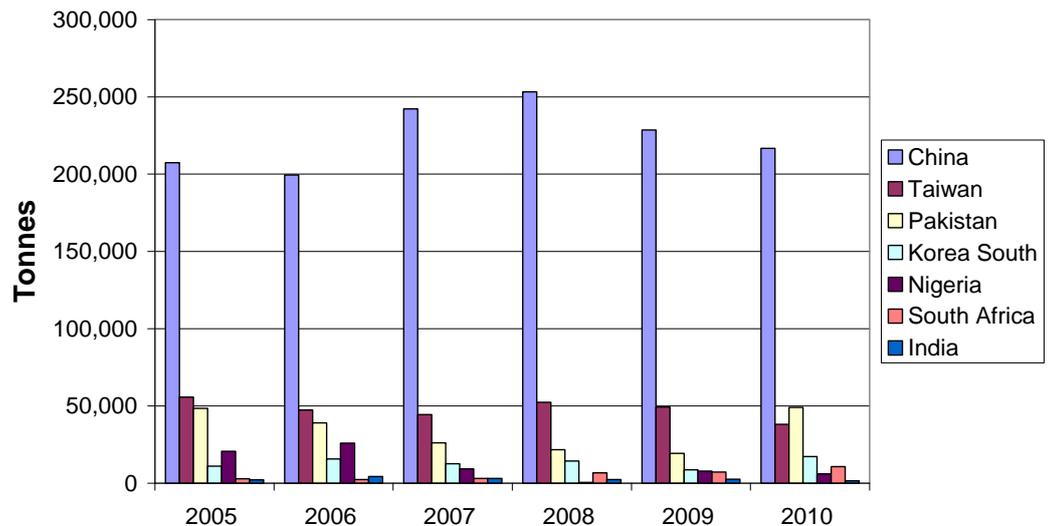
Australian tallow was exported to 26 export destinations in 2010 according to the Australian Bureau of Statistics. China remains the dominant market for Australian tallow. ABS figures show that about 352,000 tonnes of tallow were exported in 2010 and 217,000 tonnes (about 62% of exports) went to China. The next major market is Taiwan at about 50,000 tonnes per year but the Taiwanese market was down to 38,000 tonnes in 2010 and was overtaken by Pakistan. The Pakistan market increased from 20,000 tonnes to 50,000 tonnes from 2009 to 2010. South Korea, South Africa and Nigeria each took over 5000 tonnes of Australian tallow in 2010.

There were a total of 23 destinations for Australian meat meal in 2010. Indonesia has been the main export market for meat and bone meal since 2000 but China took 64,000 tonnes in 2010 compared with 52,000 tonnes to Indonesia. This change reflects the opening of the Indonesia market to US products while China remains closed to USA meat meal. In addition, the high price of fish meal in 2010 stimulated demand for meat meal in China. Total exports of meat meal in 2010 were 261,000 tonnes or about 50% of production. Exports volumes were up due to the strong demand from China. Taiwan remained an important export destination taking 45,000 tonnes and the USA and Canada were good markets for ovine meal, taking 22,000 tonnes. Exports to the USA and Canada were down from 32,000 tonnes in 2009 due to weaker sheep kills in 2010. Vietnam has been a steady mover in volumes of imports from Australia and exports to Vietnam broke the 20,000 tonne barrier in 2010.

Annual Meat Meal Exports



Annual Tallow Exports



The Domestic Scene

Demand for meat and bone meals by domestic feed mills should be firm in the future if recent outlooks for poultry and egg production are anything to go by. The Australian Egg Corporation Limited (AECL) has reported that egg consumption has reached 200 per capita. In 2007 the AECL set a target of increasing consumption from 171 to 200 by 2010 and this target was reached in January 2011. The increase in egg consumption since 1993 has been 50 eggs per capita or 33%. The AECL expects con-

sumption to increase to 210 eggs per capita during 2011

Poultry consumption is similarly on the rise. It is currently at 38 kg per capita, compared with 31 kg in 2000 and is predicted to reach 39.6 kg per capita in 2015. Production of 872,000 tonnes carcass weight in 2010 is expected to increase to 1,010,000 tonnes by 2015 according to the Australian Bureau of Agricultural Research Economics and Sciences.

ARA 11th International Symposium Gold Sponsors

The Australian Renderers Association wishes to sincerely thank the following companies who at the time of going to print had committed their support of the 11th International Symposium as Gold Sponsors.



ARA 11th International Symposium Sponsors

The Australian Renderers Association wishes to sincerely thank the following companies who at the time of going to print had committed their support of the 11th International Symposium as Sponsors.



Air Drying

In 2008 there was a case of dioxin contamination of pork in Ireland. This led to a major recall and destruction of meat. A report on the incident has identified contaminated feed as the cause of the problem. The feed was produced in a direct-fired air dryer. Recycled mineral oil contaminated with transformer oil was used to fire the hot-air dryer and PCBs and dioxins in the transformer oil were transferred to the feed. In this case the feed was produced from surplus human food such as bread and confectionary products but rendered products could be affected in the same way if operators are not careful about the fuel used in direct-fired dryers.

The report, with the benefit of 20/20 hindsight, makes a fuss about the failure of the feed production HACCP plan

to recognize the risk of contamination from fuels used in direct-fired dryers. As a result of the incident, direct-fired dryers used for feed production in Ireland must now use gas, diesel or kerosene as fuel.

There is no suggestion that animal protein meals produced in direct-fired dryers could be contaminated by dioxins if the appropriate fuel is used. In fact direct-fired dryers are used around the world for drying food products such as milk, tea and rice. But Australia should learn a lesson from the Irish experience and be vigilant about what fuels are used to fire dryers. In particular renderers should stick with natural gas, LPG and diesel and not be tempted to use recycled oils, regardless of price.

(Continued on page 12)

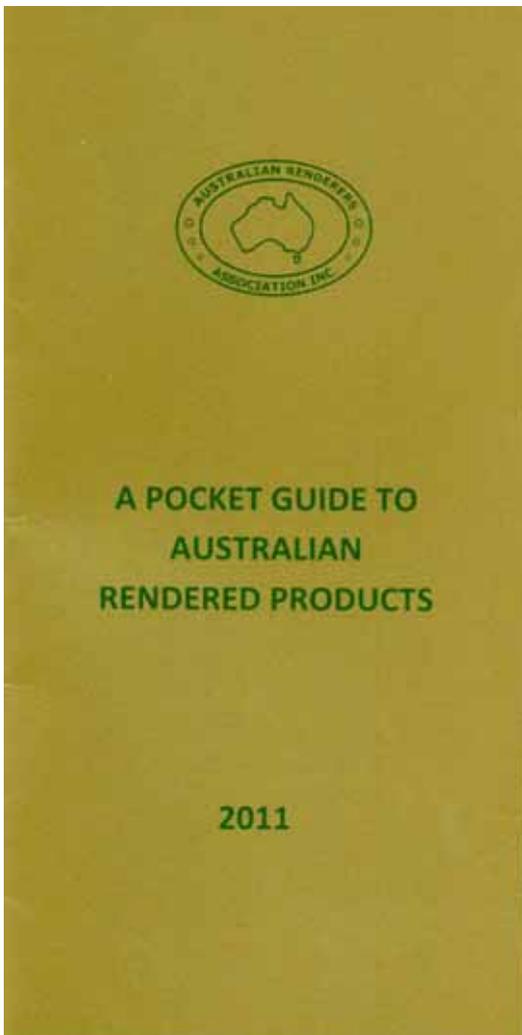
(Continued from page 11)

FloDry Engineering, one of the main suppliers of hot-air driers in Australia has told Rendering Circles that it does not recommend fuels other than natural gas, LPG or high speed diesel for its driers. Keith Engineering also recommends the use of these fuels in their ring driers

Combustion experts have advised that while direct-fired driers will not contaminate product with dioxins if the correct fuel is used, other quality problems could arise if driers are not correctly maintained. For example a badly adjusted burner can result in soot or unburned fuel in the dried product. A dried meal contaminated by unburned oil is likely to be rejected if fed to animals. Renderers should make sure that burners of direct-fired driers are tuned at least once a year to make sure that there is complete combustion of fuel. A tune up of the burner will not only reduce the risk of contamination of the product, it will also ensure efficient drying and help reduce fuel costs.

Handbook

The ARA has published a Pocket Guide to Australian Rendered Products. The guide includes background about the ARA and rendering in Australia. It also contains information about product specifications. The guide will be in the symposium packs and extra copies are available from Graeme Banks.



FLO-DRY. PROVEN IN THE MOST DEMANDING RENDERING ENVIRONMENTS.

Flo-Dry's advanced, innovative systems minimise by-product recovery costs resulting in fast pay-back and quality output.



- LOW TEMPERATURE & CONVENTIONAL MEAT & BONE RENDERING SYSTEMS
- FISH RENDERING
- FEATHER MEAL PROCESSING
- BLOOD DRYING
- HYDROLISERS
- WASTE WATER TREATMENT
- EVAPORATORS
- ODOUR CONTROL BIO-FILTERS & AFTERBURNERS
- ENERGY CONSERVATION
- BIODIESEL



**CERTIFIED
STERILISATION**
TESTED AND APPROVED TO
INTERNATIONAL STANDARDS

FLO-DRY ENGINEERING LIMITED

10 BEATRICE TINSLEY CRESCENT,
NORTH HARBOUR INDUSTRIAL ESTATE ALBANY, AUCKLAND
NEW ZEALAND, P O BOX 33949 TAKAPUNA

LEADERS IN THE DESIGN,
MANUFACTURE AND
INSTALLATION OF BY-PRODUCT
PROCESSING SYSTEMS.

SOME RECENT PROJECTS...

NEW ZEALAND

Waikato By Products Ltd
1998 - Wastewater Treatment Plant

Auckland Farmers Freezing
Co-operative Ltd
1999 - Gelbone Separation

Nelson Bays Meat Producers Ltd
1997 - Bio-Filter

Waikato By Products Ltd
1997 - Bio-Filter

Wallace Corporation Ltd
1997 - Wastewater Treatment Plant

INDIA

Frigorifico Allana
1995-2008 (8 Plants)

GIEX
2007 - Meat & Bone LTR Rendering

AUSTRALIA

Camilleri Stockfeeds Pty Ltd - NSW
2008 - Blood Dryer

Harvey Beef - WA
2008 - Blood Dryer

Murgon Leather Pty Ltd - Qld
2007 - Fleshings Fat Plant

Tasman Group - Tas
2004 - Meat & Bone LTR Rendering

Southern Meats Pty Ltd - NSW
2001 - Blood Dryer

Stambroke Beef Pty Ltd - Qld
2001 - Dryer

Hazeldene Chicken Farms Ltd - Vic
2000 - Blood Dryer

Oskey Abattoir Pty Ltd - Qld
1998 - Meat & Bone LTR Rendering

Monbeef Pty Ltd - NSW
1997 - Meat & Bone LTR Rendering

Rockdale Beef Pty Ltd - NSW
1992 - Meat & Bone LTR Rendering

FOR MORE
INFORMATION CALL
64 9 415 2330

or email info@flo-dry.com

www.flo-dry.com