



Rendering Circles

A newsletter produced by the Australian Renderers Association Inc.

NO. 20—March 2010

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

From the President

A happy New Year to all in the rendering community. Let's hope we see the end of the GFC in 2010 and better trading conditions, particular for our associates in the meat export industry. The ARA has a heavy workload for 2010. While the Association has not committed to any New Years' resolutions, there are plenty of items on the agenda to be resolved in 2010.

The Association wants to get Rendering Circles back on track with regular issues. If you are reading this, at least the first part of the plan has been fulfilled. The other initiative aimed at improving communications is a revamp of the ARA website.

Moves to resurrect Rendering Circles and relaunch the web site are the easy parts of the 2010 plans. A tougher task but one that is high priority, is to develop a submission to have the rendering industry recognised as Energy Intensive Trade Exposed. There is plenty of uncertainty surrounding the Government's carbon pollution reduction scheme but if the white paper is to be believed, there are clear benefits to being an EITE industry. The ARA estimates that CO₂ equivalent emissions from rendering plants are about 13 tonnes per million dollars of revenue. This should qualify renderers for a 60% free issue of permits to emit greenhouse gasses. The cost of permits is difficult to predict but the Government has talked

about \$25 per tonne and the Greens are suggesting \$20 per tonne. There will be a threshold for emitting greenhouse gas before permits are required and this threshold could be 25,000 tonnes of CO₂ equivalent emissions. The ARA estimates that plants that will be required to purchase permits to emit greenhouse gas produce about 400,000 tonnes of product. A 60% issue of permits could be worth a total of \$5 to 6 million to these plants, at least in the first year of operation of the CPRS. The ARA needs members to support the submission for EITE status by agreeing to provide details of energy use and production so that the criteria for EITE can be shown to apply to the rendering industry.

The ARA has been working with AQIS to secure market access for rendered products. Some of the recent successes have been opening the Philippines market and clarifying requirements for exporting products to New Zealand. The outstanding issue is opening the Japanese market for poultry meal. Market access negotiations have been going on for three years but a conclusion appears to be close. The ARA will be putting efforts into getting this market open in conjunction with AQIS.

In 2009 the second benchmarking survey of energy and water use in rendering was conducted. The ARA will be conducting another survey in 2010. I hope that as many members as possi-



ble take part in the 2010 benchmark survey.

In March VICTAM is conducting a group of trade shows and seminars in Bangkok. VICTAM Asia is aimed at the feed industry and gives equipment and ingredient suppliers the opportunity to showcase their products. The ARA is providing sponsorship and has engaged Dr Geoff Allan to give a talk about the use of meat and bone meal in feeds. Geoff is also chairing and presenting a paper in the aquaculture session. The ARA is taking part in the event in conjunction with the New Zealand Renderers Group and members are encouraged to attend and promote their products.

There is plenty more activity for the ARA in 2010 including preparation for the 2011 Symposium and publication of a handbook for renderers. As always, members who can contribute time and expertise to ARA programs are most welcome.

Craig Palmer

New Rendering Plant for Peel Valley Exporters

Keith Engineering has designed and constructed a new rendering plant at Peel Valley Exporters, Tamworth. The plant was commissioned in February 2009 and has been operating successfully since. John McCluskey, Peel Valley's Operations Manager described the plant as "state of the art".

The Peel Valley Exporters abattoir processes sheep and lamb only and the rendering plant is dedicated to production of ovine material. The abattoir process up to 8000 sheep and lambs per day and the

rendering plant produces about 25 tonnes of tallow and 20 tonnes of meat meal. The plant is based on a Keith 900 series New Generation cooker and also has a batch cooker to hydrolyse woolly material such as heads and hocks. The batch hydrolyser is computer controlled and fully automated. Other innovations at the plant are a Keith rotary blood dryer, meal load out bin on weigh scales to accurately control load outs and a biofilter designed by The Odour Unit Pty Ltd and constructed by Keith Engineering.



Presses and Cake screw at Peel Valley Exporters



Keith 900 series cooker installed at Peel Valley

AQIS Rules!

AQIS is pursuing several market access opportunities for rendered products. The priority for the ARA is access for poultry meals into Japan. Japanese pet food manufacturers are keen to source Australian poultry meals. However, negotiations over conditions for access have been going on for three years. Final requirements are not yet known but it is likely that most of the requirements of the Japanese MAFF will be met by plants that comply with the Australian Standard for the Hygienic Rendering of Animal Products and the ARA Code of Practice. There are some extra requirements, particularly that ruminant material cannot be processed in the same production line as poultry meal and that poultry meal must be tested regularly for the presence of ruminant material. It is also likely that plants will have to be audited for compliance with Japanese requirements, and will have to be registered with the Japanese MAFF.

Biosecurity New Zealand has proposed changes to requirements for importing rendered products that are used in aquaculture products. AQIS in conjunction with the ARA has provided comments on a risk assessment prepared by the Biosecurity

New Zealand. The AQIS position is that compliance with the Australian Standard for Rendering will produce safe products as identified in the risk assessment.

AQIS is negotiating with China about certification for tallow that is used for further processing to make edible products.

Accredited Plants

Several establishments were accredited in 2009. The newly accredited plants are: Sunland Protein at Landsborough QLD; Swift Australia at Cobram VIC; WAMMCO at Katanning WA; Wingham Abattoirs at Macksville NSW and Bindaree Beef at Inverell NSW. Fifty-nine establishments are now accredited by the ARA and more are expected to join the list in 2010.

ARA Meeting Dates

The next meeting of the ARA is scheduled for May 21st, 2010 in Brisbane. Venue to be advised.

Accreditation Workshops

The ARA's workshop on Hygienic Rendering of Animal Products has been held at the University of Western Sydney's Hawkesbury Technologies motel and conference centre for the last 16 years but a change in venue was necessary for the 24th workshop held in August 2009. The University has leased the conference centre and motel to the NSW Police Force for training purpose and the facilities are no longer available to the ARA.

The August workshop was conducted in another conference room provided by the University and participants spent 5 days in a student accommodation block.

The 24th workshop was attended by 30 participants. This brings the number of people accredited at the workshop to 651 since 1992. Robert Burns of Castricum Brothers did best in the exam and he was closely followed by Nick Dash of AQIS, Kate McAuliffe of Australian Tallow Producers and Rebecca Ogg of AFFCO.

As usual members of the ARA made valuable contributions to the workshop. Kevin Pratt and the team at Camilleri Stockfeeds hosted a visit to the plant at Maroota. Kevin also provided the workshop satchels. Rick Carter of Kemin Australia gave a talk on Salmonella inhibitors and antioxidants and Bill Trollope of Keith Engineering gave a presentation about screw presses. Bill also sponsored the official dinner at the Richmond Club

A workshop was not scheduled for February 2010 because the microbiology laboratories used by the workshop were being relocated and maintenance work in the accommodation block was expected. The next workshop should be in July 2010.



Rob Burns of Castricum Brothers discovers the world of micro-organisms while Julie Markham of UWS, Brad Birney of Northern Coop Meat Co, Henry Hart of John Dee and Brent Speirs of Lowe Corporation look on.

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



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

Stanbroke Beef Pty Ltd - Qld
2001 - Dryer

Hazeldene Chicken Farms Ltd - Vic
2000 - Blood Dryer

Oakey 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



Julie Markham of UWS explains salmonella and meat meal to Jordan Pickering of Dalriada Meats, Rebecca Ogg of AFFCO, Shayne Hovey of Dalriada Meats and Kate McAuliffe of Australian Tallow Producers.

Meat Meal and Tallow Destinations

Exports of meat meal and tallow over the last 3 years according to the Australian Bureau of Statistics are shown below. Indonesia remains the main market for meat and bone meal and China is the dominant market for tallow. The increase in exports of MBM to the USA is due to the demand for specialty meals, particularly ovine meal, to make pet food. Some Australian renderers have switched to production of single species ovine meals to take advantage of the market for pet food ingredients and production of ovine meal has increased. The increase in exports to Thailand is reported to be poultry meal for use in aquaculture feeds. Tallow exports were to the traditional markets of China, Taiwan and Pakistan. Exports of tallow to South Africa have re-emerged in the last two years with 10,000 tonnes
(Continued on page 6)

MLA Co-product Compendium

MLA has published a compendium of co-products research projects. The compendium contains descriptions of MLA co-products projects conducted since 1992 and provides commentary on the context of the projects and opportunities to increase the value of co-products. It includes a section on rendered products.

The rendering section includes information on yields and values. It also discusses the uses of rendered products and quality issues. Thirteen diverse projects on rendered products are discussed and another thirteen projects about the use of meat meal in aquaculture are presented. Projects on aquaculture have shown that meat and bone meal works well in diets for prawns, barramundi and silver perch but for maximum inclusion in feeds, meat meal should be less than 20% ash and more than 60% protein. Fat content should also be low. Examples of methods for producing low ash, high protein meals are discussed.

Copies of the compendium are available from MLA by contacting Raj Margapuram

Tel: 02 9463 9115

E-mail: rmargapuram@MLA.com.au



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 MATRAVILLE NSW 2036
 Ph: 02 9316 9042
 Fax: 02 9316 8717
 Email: keitheng@bigpond.com
 Web: www.keitheng.com

Record prices for Animal Protein Meals

What a year 2009 was for rendered products – PRICES, DEMAND and the MARKETS!

In January 2009 markets were steady, with meat and bone meal (MBM) at \$520 per tonne, poultry meal (PM) \$720, feather meal (FM) \$550, blood meal (BM) \$740 and the exchange rate US\$0.70. During the month the dollar fell to 65 US cents and MBM increased to a healthy \$650. PM increased to \$840, FM was steady at \$570 and BM went to \$840. Soy bean meal (SBM) was US\$309 per short ton.

Each month had its own story, be it SBM prices or exchange rates, for example:

MBM increased to a record of \$861 in May then down she came to \$650 in July and \$510 in August. The price hit \$490 in October and recovered to \$665 in November. The price range for the year was \$490 to \$860.

Domestic prices for MBM were disjointed. They were from well above (\$50) to well below (\$60) export prices fuelled mainly by the dollar and the position of local SBM prices.

FM traded within a \$100 range from \$700 in Aug to \$800 in July and a record \$820 in November. These numbers represent very good returns to renderers.

PM fluctuated from \$720 in January to \$825 in December but in the interim it peaked at A\$1050 in May (a record). It regularly traded between \$720-1000 in the first 6 months. Domestic prices were generally between \$850-950 with obvious spikes up to \$1080 in May/June. Prices were fuelled by SBM and fishmeal movements.

Wide ranges in BM prices are typical and 2009 was no exception. Prices were from \$710 in January to \$990 in December with a peak at

\$1090 in August. Despite lulls in Jan/Feb BM was not below \$800 for the rest of the year. Domestic sales were consistently \$50-\$100 above the export prices.

SBM was also up and down from US\$269 per short ton in March to a peak of US\$428 in June. In September there was a US\$100 slide from US\$387 to US\$287. At the end of the year in December the SBM price was \$328-316.

Australian origin protein meals traded at good levels throughout the year and despite fluctuations there were good returns to renderers. The exceptions were blood meal in the early part of the year and MBM at A\$490 in October.

The dollar was a story all to itself. The A\$ ranged from US\$0.63 in February to US\$0.9370 in November.

While we certainly saw premiums for ARA accredited plants on MBM pricing, additional premiums were available for the accredited plants with Indonesian listing. Pure beef MBM also attracted premiums

Ovine meal was a special case. Prices started at A\$1100 up to A\$1200 but hit a low of \$860 in June. In the second half of the year prices were around A\$800-900.

EU certified ovine meal was A\$1200 - A\$1400 in the first part of the year and was down to \$1000 by December.

Those who took contracts and positions for ovine meal from Sept/Oct 2008 for calendar 2009 supply year did much better. Prices were from A\$1350 and were up to A\$2850 when the best US\$ exchange rate applied, as reported at the Symposium in July.

Stephen Cooke



PROVEN COMMITMENT TO THE RENDERING INDUSTRY

Salmonella control
with Sal CURB® 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.

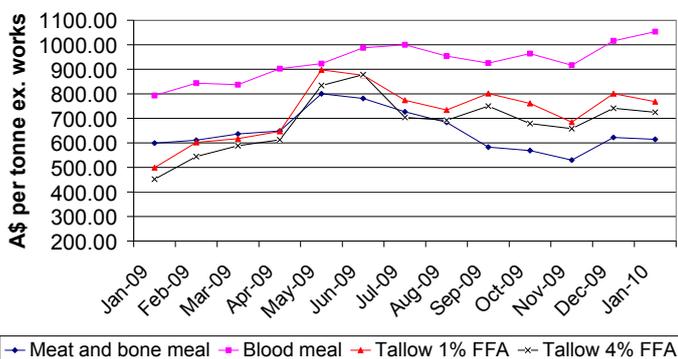
Price Summary for Rendered Products

The price fluctuations discussed in the 2009 market report for meat meal are illustrated in the figure below. Prices in the figure are from the MLA Co-products Price Monitor and are average ex. works prices from a range of renderers. The prices may not reflect specific export or domestic sales at a particular time. The sharp increase in tallow prices in May was due to demand from China and a shortage of supply in Australia and New Zealand. In addition the price of palm stearine went from about US\$500 FOB Malaysia at the beginning of April to US\$800 in May.

Meat and bone meal prices also picked up in May. Prices were led by domestic demand and were due to a shortage of soy bean meal on the domestic market.

Prices tended to ease from May/June but picked up at the end of the year partly due to concerns about short supplies in late December and January. Meat and bone meal prices were stimulated by domestic demand and tallow prices responded to improved demand from China.

Prices of rendered products in 2009



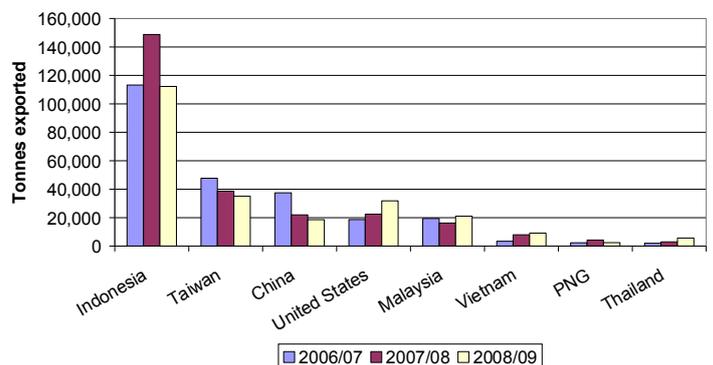
Meat Meal and Tallow Destinations (cont)

(Continued from page 4)

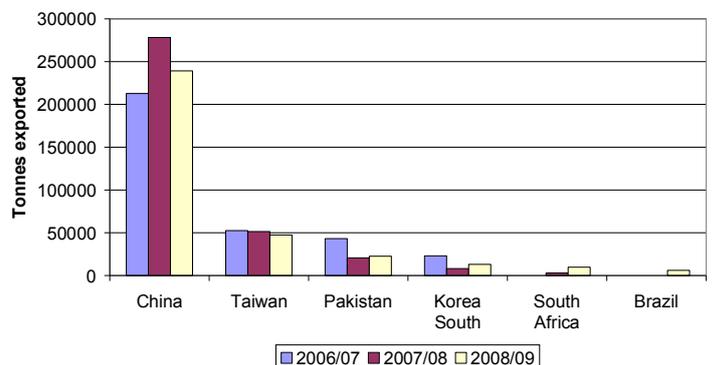
being exported in 2008/09. Brazil was in the market for tallow in 2008/09 and Australia exported 6000 tonnes.

Total exports were 386,500 tonnes of tallow and 277,200 tonne of meat meal in 2007/08 and 362,600 tonnes of tallow and 249,800 tonnes of meat meal in 2008/09.

Major export destinations for MBM



Major exports destinations for tallow



Rendering Benchmarks

The ARA conducted a second survey of energy and water use to set some benchmarks for rendering processes. The establishments that responded to the survey were different to those that took part in the 2008 survey so it is difficult compare results. However it looks like from 2008 to 2009 there was a reduction in the gas consumed per tonne of water evaporated from raw material.

Equipment and raw material differences mean that energy use is not really comparable between plants. Yield of product from raw material makes a big difference and obviously high yielding raw material such as fat and bone requires less energy input to produce a tonne of product than low yielding gut material. To allow for this, the ARA benchmark figures for energy and water use are related to the amount of water removed or the difference between raw material input and product output. This allows energy use to be compared at plants with different yielding raw material but other differences such as the use of waste heat for evaporation and wet rendering as opposed to dry rendering are not accounted for in the benchmarks. Figures from all plants are included in the average results. There have not been enough participants to make a serious comparison between different styles of plant but use of waste heat evaporation results in substantially lower energy use. Plants with wet rendering systems tend to be at the lower end of energy use according to the survey data but there are a number of variables that makes a direct comparison between dry rendering and wet rendering plant unreliable.

Stewart McGlashan of Johns Consulting has examined the results of the benchmark survey and has estimated greenhouse gas emissions from rendering operations. From Stewart's calculations, greenhouse gas emissions expressed as CO₂ equivalents were 0.648 tonnes per tonne of water removed in 2007/08 and 0.504 tonnes in 2009.

The table below is a summary of results from the 2008 and 2009 ARA benchmarking surveys.

Units per tonne of water removed	Mean benchmark for financial year	
	2007-2008	2008-2009
Gas (GJ)	4.38	3.63
Electricity (kWh)	101.52	118.25
Water use (kl)	2.06	3.36
Waste water (kl)	1.70	3.55
CO ₂ emissions (tonnes)	0.648	0.504

People and Places

Shane Pratt has returned to Camilleri Stockfeeds after a couple of years out of the rendering business. Shane has 14 years experience in rendering and has returned to Camilleri to manage operations with a focus on building up raw material intake.

Dennis King reports that ADT is about to start construction of a new rendering plant. The project will demonstrate the effectiveness of the ADT rendering process and products. Energy saving initiatives are planned in conjunction with the ADT dryer. The project has MLA support to help evaluate process efficiency, products and potential energy savings. The plant should be operating by September.

Peerless Holdings has appointed Clive Brend as General Manager Operations. Clive is responsible for all operations from raw material receipt to finished goods despatch, including planning, project engineering, maintenance, laboratory and quality assurance. His responsibilities cover rendering, re-finishing and food packing processes. Clive is from the dairy industry and was previously Operations Manager for Victoria & South Australia at National Foods.

China.

Is your MBM or Tallow registered for access to this huge market?

Gain the opportunity to export to this lucrative market directly or through your trader.

Feed ingredients from all plants to be exported to China must be registered with the Chinese Authorities. With a resident colleague based in Beijing we can overcome all the obstacles, complete all document translation, oversee the laboratory testing and streamline the process.

Registration services for Australian and New Zealand plants available.

SOUTHERN DOWNS MANAGEMENT SERVICES PTY LTD

60 Wood Street, Warwick, Qld 4370

Tel: 07 4661 9911 Fax: 07 4667 0199 Mob: 0418 884 190 Email: dmking@sdms.com.au



**G-TECH
BELLMOR**

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

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



Member of ARA

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

Rendering Industry Awards

At the 2009 ARA Symposium, two rendering stalwarts were honoured by the ARA. Paul Stenzel received the Ron Lyon award and Don Seaton was presented with the Service to Industry award.

Don joined Gardner Smith in 1951 and in 1964 Charles Gardner gave him the opportunity to buy a controlling interest and from then he remained Managing Director until 1993. He was Chairman of the Board until 2007 and he remained as a non-executive director until his retirement in October 2009.

In the 1960s with Gardner Smith's position in the Australian market firmly established, Don actively pursued opportunities for expansion into overseas markets. He travelled extensively to countries such as Pakistan, Iraq, Iran, India, South Africa and East Africa to promote the company and Australian products, particularly fats and oils, and establish business relationships.

Don encouraged continued expansion into bulk liquid storage and by 1970, with the valued assistance of John Tranter, who at the time was Victorian Manager and Company Director, terminals had been established in Melbourne, Brisbane, Fre-

mantle and Adelaide and Devonport soon followed.

In the early 1980s Don identified China as a developing market and arranged a company trade mission. He was responsible for continuing expansion during the 1980s with offices and terminals established in Singapore, New Zealand, UK and South Africa.

In 2004 Don Seaton was presented with an Australian Export Hero Award by the Australian Institute of Export and in 2009 he received an award from the Australian Renderers Association for his service to and investment in the fats and oils industry.

The Ron Lyon award acknowledged Paul Stenzel's contribution as a practical renderer and of course his seven-years as President of the ARA. During Paul's presidency the ARA continued to build relationships with external agencies such as AFFA, AQIS, TSEFAP and other industry associations. Paul is well respected both within and outside the ARA for his representation of the rendering industry.