final report

Meat Inspection and Quality Assurance Network

Abstract

MINTRAC again facilitated fourteen Quality Assurance Managers' Network meetings during 2012-2013 attended by representatives of 114 different organisations including fifty eight different meat processing companies, nine different regulatory bodies, eight industry associations, four research agencies, fifteen registered training organisations and twenty four companies directly servicing the industry.

The agendas for these meetings covered a range of industry research and development outcomes mainly focusing on sources of micro contamination, micro sampling/testing and meat quality. Animal welfare again featured prominently and the network assisted companies to:
- developing strategies to address new AW regulatory requirements
- access funding to address new regulatory requirements for both export and domestic companies
- deliver training to key company staff.

 In addition, a wide range of state and commonwealth government policy changes impacting the meat industry were addressed through the networks.

The ninth annual Meat Inspection and Quality Assurance Conference was held in Brisbane in September 2012. The conference attracted one hundred and five delegates who came from all the States and Territories. Speakers addressed a range of topics from micro contamination, HACCP reviews, animal welfare, and meat science. Many of the workshops presented findings from current industry projects or research. The conference included delegate workshops where participants considered the implications of changes to the meat safety course, how to assess livestock handling and how to train the increasing numbers of back packers.

The recommendations provided in Section 7 of this report focus on using the QA network system to assist industry in addressing some of the major challenges the industry will face in the near future including:
- meeting the requirements of importing countries
- responding to likely changes in the Australian Export Meat Inspection System
- developing a continuous improvement approach to animal welfare outcomes
- responding to the changing nature of the meat industry's workforce.
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Executive summary

The objectives of the Meat Inspection and Quality Assurance Network project are:
- to facilitate the dissemination and application of information that impacts on quality or food safety from regulators, researchers and industry bodies
- to ensure the smooth implementation of regulatory and technical initiatives
- to ensure that training programs reflect industry's needs through the provision of updated training materials and professional development to trainers and lecturers.

The MINTRAC Meat Inspection and Quality Assurance network seeks to achieve these achieve these objectives by:

- creating a community of practice for meat safety and QA practitioners
- ensuring that the network and its meetings function as a mechanism for R&D extension to industry, regulators and trainers
- providing a forum for regulators and industry bodies to explain changes in the regulatory environment and for QA managers to explore how this will impact on companies.

The benefits that this community of practice deliver to the industry should not be underestimated. The meat industry's QA and meat inspection personnel work under significant pressure and often in isolated regional locations. These personnel are able to use the networks to source information on new or emerging regulatory and customer requirements in collaborative meetings that underpin the individual's ongoing professional development. Furthermore the networks provide a forum for practitioners to discuss with their peers, researchers and regulatory representatives the practical implications of changing QA requirements and ways to effectively meet these demands.

The networks also provide the means of ensuring that meat industry training requirements and priorities generated by changing regulatory, customer and importing country requirements are communicated to industry bodies as well as State and Federal Training Authorities. Such issues as microbiological testing, meat inspection standards, stock handling, humane slaughter and animal welfare officer training are ongoing issues at the network meetings and continue to result in successful submissions to state training authorities for funding.

Attendees at network meetings include QA managers, Senior Meat Inspection staff, Regulators from state and federal bodies as well as meat industry trainers, peak bodies, and research agencies such as AMPC, MLA, State DPIs and CSIRO.

Funding for this project in 2012-2013 funded:

- fourteen state-based network meetings
- the National MI and QA conference
- professional development workshops at the meetings.

The fourteen network meetings held during 2012-2013 discussed a range of industry R&D outcomes, new regulations and their implications for the processing sector, including:
- implications of microbiological testing results in the US market
- port of entry rejections in the US
- audit findings from overseas reviews.
- animal welfare regulations in NSW
- implementation of EU training requirements.

The annual meat inspection and quality assurance conference held in September 2012 was attended by just over one hundred delegates in Brisbane. The speakers addressed a range of topics with the highlights being;

- future trends in meat retailing in Australia
- regulatory reform and changing market access requirements
- AMPC on industry funded quality and food safety research projects
- AMIC on market access
- changing micro testing requirements for red meat markets and its impact on red meat processor laboratories
- the impact of HACCP as a solution to food safety issues
- regulating animal welfare in the domestic sector, a new approach
- supply chain auditing for a UK supermarket chain the NZ experience
- meat Inspector currency assessment, identifying the vital competencies
- developing a stock handling assessment checklist for your plant.

Contents

1 Background

The Meat Inspection and Quality Assurance network is a state based network of researchers, industry QA practitioners, trainers and regulators. It is a well established network that is a highly effective means of distributing new information and providing extension services for AMPC and MLA Research and Development activities. The network meetings offer forums for delegates to explore explain and discuss the implications of new industry developments.

This project includes fourteen network meetings and one annual conference.

Close liaison with AMPC, MLA, DAFF, State Food Authorities and AMIC occurs when setting meeting agendas and identifying the professional development activities for this network.

This project includes:
- organisation and running of two network meetings in Queensland, Victoria, South Australia and Western Australia, and four meetings in New South Wales
- running two domestic networks in NSW and giving presentations at the Queensland Country Meat Processor Association and Young Guns meetings
- assisting with the professional development activities for Queensland Country Meat Processor Association members
- running a national two-day conference which features new and emerging research, regulations and practices occurring both in Australia and internationally
- development of communication channels between the various parties involved including industry, regulators, research agencies and training institutions
- inclusion at each meeting of, as a minimum, two AMPC/MLA projects for delivery via presentation (extension) to industry
- promoting the incorporation of AMPC/MLA R&D outcomes into QA and food safety arrangements
- ensuring that new requirements and practices are incorporated into the nationally accredited qualifications
- monitoring on-plant uptake of knowledge, practices and products featured through the network
- advising on training materials that need modification due to changes in regulations, research outcomes, new technologies etc.
- collection and analysis of data to determine the success of the networks in meeting their objectives.

The project will address the recommendations from the 2011-2012 program.

2 Project objectives

The objectives of this project are:
- to facilitate the dissemination and application of information that impacts on quality or food safety from regulators, researchers and industry bodies
- to ensure the smooth implementation of regulatory and technical initiatives
- to ensure that training programs reflect industry's needs through the provision of updated training materials and professional development to trainers and lecturers.

3 Methodology

3.1 QA Network meetings

Fourteen QA Manager network meetings were held during 2012-2013.

Agendas are set by consultation with AMPC, AMIC, DAFF, and State regulators. Meat processing companies and research organisations are also directly invited to contribute items for discussion. Additional speakers and workshop presenters are invited as required.

AMPC fact sheets have been a key part of the network information dissemination process acquainting network participants with the latest R&D activities as well as being excellent discussion starters on the most current of issues. In addition handouts from AMIC, MLA, Meat Industry Services and CSIRO etc are collated into the meeting folders to ensure that any recent publications are appropriately disseminated.

At each meeting MINTRAC also displays any new products which have been released. Included in display items for 2012-2013 was the *NLIS training* kit.

All MI and QA Network meetings are minuted, and minutes are distributed to attendees and those who apologised, as well as AMPC, AMIC and MLA.

3.2   Professional development program

The MINTRAC Professional Development Program is supported by the network and industry requirements are established by:
- a survey distributed to all processing companies twice-yearly, inviting them to identify their requirements
- a scheduled discussion item on every network meeting agenda
- incidental requests made directly to MINTRAC by processing plants from time to time.

The programs, funded separately under the AMPC/MLA Professional Development Program are advertised and promoted through the network so optimal numbers can be achieved enabling the program to be financially viable.

3.3   The national Meat Inspection and Quality Assurance conference

Run across two days at the end of September each year, the conference is rotated across the states of Qld, NSW, Vic in order to maximise access from those unable to make long trips.

The location of each National Conference is set twelve months in advance, and the draft program and keynote speakers are in place by the end of June.

A project budget is set early in the planning, and funds are drawn from:
- the budgeted contribution from the MI &QA Network project
- delegate registrations (red-meat levy-payers receive a subsidy)
- exhibitors
- sponsorships.

All aspects of the conference are managed in-house by MINTRAC, including the management of registrations, exhibitors, marketing and publicity, printing and conference facilitation. Delegates are asked to complete an evaluation at the end of every conference, and this feedback informs the changes and improvements made to subsequent conferences.

4 Results and discussion

4.1 Quality Assurance Network meetings

Fourteen QA network meetings were held during 2012-2013, as shown in the table below.

State	Location	2012	2013
Victoria	Melbourne	23 September	22 May
Western Australia	Perth	3 August	24 May
New South Wales	Tamworth	16 November	30 May
Queensland	Brisbane	9 November	18 April
South Australia	Adelaide	21 October	9 May
New South Wales	Wagga Wagga	2 November	2 may
NSW /Qld(Domestic)	Sydney/Canberra	7 November	15 May

4.1.1 Key issues raised

Key issues raised through the network meetings in 2012/2013 were as follows.

- R&D outcomes
- Overseas review audit reports and outcomes
- Interventions to control microbiological contamination
- HACCP reviews
- Sheep and cattle handling practices
- Micro testing results from the US
- Port of Entry rejections
- Meat inspection arrangements under AEMIS
- AW requirements for EU and NSW
- New training products, courses and funding
- Professional Development
- Inductions for AAOs
- NLIS training opportunities.

4.1.2 Industry R&D dissemination

The fourteen network meetings held during 2012-2013 had standing Agenda items to discuss completed and ongoing R&D projects funded by AMPC and MLA. Researchers presented on the outcomes or nature of their research and covered such projects as
- Water saving in paunch processing and chiller cleaning
- Meat quality and genetics
- Electrical stimulation

4.1.3 Network attendance statistics

Over the 2012-2013 year 356 individual attendances were recorded at MI and QA Network meetings and the annual conference. The breakdown of network and conference participation is provided below:

Category	2010-11		2011-12		2012-13	
	Companies	People	Companies	People	Companies	People
Meat Processing Companies	66	131	64	139	58	156
Registered Training Organisations	13	43	22	52	15	45
Industry Organisations	7	66	10	85	8	86
Regulators	7	40	7	38	9	30
Service Organisations	14	27	18	33	24	39
Totals	**107**	**307**	**121**	**347**	**114**	**356**

4.2   Professional development program

The network also supplies feedback on the need for specific professional development programs. Professional development requirements and priorities are established by means of an industry questionnaire conducted twice yearly. The network also serves as a channel for promoting professional development activities.

The 2012-2013 program (funded under a separate AMPC/MLA project) has included:

- Stock handling
- Assessing effective stunning
- Internal auditing
- QA training for supervisors
- Animal Welfare Officer training.

4.3   The national MI and QA conference

The national meat inspection and QA conference was run over the course of two days attended by 103 delegates and covered the following topics:

- Future trends in meat retailing in Australia
- Regulatory reform and changing market access requirements
- AMPC on industry funded quality and food safety research projects
- AMIC on market access
- Changing micro testing requirements for red meat markets and its impact on red meat processor laboratories
- The impact of HACCP as a solution to food safety issues
- Regulating animal welfare in the domestic sector, a new approach
- Supply chain auditing for a UK supermarket chain the NZ experience
- Meat Inspector currency assessment, identifying the vital competencies
- Developing a stock handling assessment checklist for your plant.

Speakers came from a major supermarket, AMPC, AMIC, DAFF, State Regulators, Universities and Industry suppliers.

5 Success in achieving objectives

5.1 Facilitating the dissemination and application of information that impacts on quality or food safety from regulators, researchers and industry bodies

Facilitating the dissemination and application of information that impacts on quality or food safety from regulators, researchers and industry bodies continues to be one of the great drivers for the networks. In 2012-2013 this objective was clearly achieved as shown by:

- AMPC facilitated presentations from AMPC funded researchers
- MLA's ongoing presentations focused on the changing issues associated with sampling and testing for E.coli and understanding Esam reports
- the use by DAFF to discuss the rollout of the AEMIS program and explaining the results of overseas reviews and how the regulator will respond to adverse audit findings and adverse results from Port of Entry testing and inspection
- AMIC using the networks as an ongoing forum to discuss the inspection reform process and market access issues
- NSW Food Authority used the network and conference to discuss ongoing issues with animal welfare
- AMIC and AQIS using the network meetings to address importing country requirements, such as the EU animal welfare training requirements

5.2 Ensuring the smooth implementation of regulatory and technical initiatives

The network continues to drive an industry-wide upgrade of QA and meat inspection skills by identifying requirements for the delivery of professional development workshops and courses around the country including:

- micro sampling and testing in the meat industry
- Animal Welfare Officer
- QA for supervisors
- HACCP
- HACCP refresher courses
- Assessment of effective stunning
- AAO induction.

In addition guest speakers at network meetings and the conference update QA practitioners and regulators with the latest understanding of market requirements and the science of meat processing. At the latest conference the following topics were addressed:

- Animal welfare
- MHA and in particular carcase assessment
- Sampling and testing for E.coli
- NLIS training opportunities
- Endemic disease electronic data capture and reporting for the sheep industry.

5.3 Ensuring that training programs reflect industry's needs through the provision of updated training materials and professional development to trainers and lecturers

The MI and QA networks have provided excellent intelligence to MINTRAC shaping not only the content of training Units and supporting materials but also the delivery of training to the industry. The network has provided direction with regard to dealing with:

- The NSW FA animal welfare requirements
- Ongoing issues raised by the meat inspection reform including the review of meat safety qualifications
- NLIS training requirements and delivery options
- Meat inspection currency
- Livestock handling.
- Assessment of effective stunning

THE QA networks also enable MINTRAC to get prompt and concise feedback on the professional development and training programs delivered to industry personnel.

6 Impact on meat and livestock industry – Now and in five years time

6.1 Currency and relevance of the meat industry training system

The presence of the networks ensures that the meat industry training system remains current and responsive to meat industry priorities and current research findings. This is achieved through:

- rapid dissemination of research outcomes and incorporation into the national training system
- meeting formats which ensure that all attendees are receiving consistent messages from the regulator, the industry organisations and researchers
- regular information on professional development opportunities to ensure QA practitioner currency
- opportunities for RTO staff to be exposed to the latest in QA and regulatory developments
- exposes QA practitioners and regulators to best practice examples of achieving customer and regulatory requirements. .

6.2 A community of practice for meat industry training QA and MI practitioners

Both QA and MI practitioners in regional and rural areas work in relative isolation to fellow practitioners either in this industry or even other food processing operations. The QA Manager Networks continue to provide an opportunity for QA managers to interact and network with those working in their State and derive all the benefits that come from having access to the experience and expertise of others.

Likewise researchers and regulators are able to discuss the issues involved in achieving food safety and regulatory requirements in an environment which encourages a collaborative approach to problem solving.

The networks are also instrumental in raising the level of discussion between industry regulators and researchers by promoting a shared understanding of meat processing and the required outcomes of food safety, product integrity and fulfilling regulatory demands.

The development of a community of practice for meat industry training QA and MI practitioners is also important in terms of identifying and consolidating industry demand for technician and operator training to meet industry and customer requirements.

6.3 Addressing industry strategic priorities

As the *Meat Industry Strategic Plan* is rolled out, the Networks provide the vehicle to ensure that the training implications of new and emerging food safety and quality issues are rapidly identified. Examples of how this is achieved include:

- the networks enable all parties to adopt a collaborative approach to the implementation of the inspection reform agenda allowing the identification of issues, solutions and the resources required

- a wide range of strategies which have been discussed and debated to address industry priorities to improve animal welfare outcomes

- addressing the training requirements posed by an increasing industry reliance on migrant labour such as foreign language resources, literacy and numeracy support materials, coping with diversity in the workforce, and a focus on up skilling trainers

- the adoption of training programs and strategies to address the new Australian meat inspection requirements – the network provided the means to address any new challenges that may be thrown up by overseas reviews

- ensuring that creditable, accredited, comparable training programs are in place to match new and emerging customer or market requirements, for example the EU requirements that came into effect at the beginning of 2013.

6.4 Ensuring there are forums for QA and MI practitioners to interact with researchers, regulators and industry organisations.

DAFF uses the networks as a reliable method of communication to explain changes in the regulatory system and areas of operations where there needs to be either changes or improvement to meet importing country requirements. DAFF uses this as part of its national communication strategy and when presenting to importing countries uses the networks as evidence of a comprehensive approach to disseminating food safety information.

State Meat Authorities and Departments of Primary Industries are increasingly using these network meetings to get across concerns they have about existing practices or to explain changing regulatory requirements. Both Commonwealth and State agencies find the format of the meetings gives them more opportunity to explain in detail the practical implications of changes and get feedback on implementation issues.

AMPC uses the meetings as a way to get their message across to those managers most likely to be charged with:

- Understanding the import of research outcomes to quality assurance and meat safety arrangements.
- taking up R&D outcomes.

AMPC and MLA use the networks to sound out areas of industry RD&E needs when it comes to food safety, regulatory compliance and product integrity.

AMIC has also had representatives at the network meetings to discuss industry's position on reform and its participation in joint government/industry reviews. The AMIC representatives have also provided advice on market access issues.

Researchers also use the network meetings for discussing completed research and provisional research outcomes or potential research programs as this enables them to evaluate the implications for meat processing companies.

7 Conclusions and recommendations

7.1 Communicating industry research and development outcomes to QA and Meat Inspection practitioners

The need for MI and QA personnel to be current with regulatory, research and customer requirement developments has never been more acute. QA staff are required to be more technically proficient and competent than ever before and the requirement to defend a company's QA system to auditors has never been more important.

The networks give AMPC, MLA and other research bodies a systematic and effective way of rolling out research and development outcomes to QA practitioners, regulators and training organisations. It ensures that researchers get meaningful feedback from a cross section of industry previously inaccessible to them without significant effort, time and cooperation from industry.

7.1.1 Recommendation 1:

It is recommended that MINTRAC continues to cooperate with AMPC and MLA to identify the most relevant research outcomes as Agenda items for discussion at QA managers network meetings and ensure it offers research organisations support in disseminating research outcomes and where necessary support any change being implemented by advocating for and facilitating the relevant training programs.

In particular this coming year the focus should be on disseminating research outcomes most applicable to:

- the sources of contamination during the slaughtering and dressing process
- reviewing HACCP in the context of achieving effective control points
- intervention steps on the slaughter floor
- visual carcase contamination assessment
- microbiological sampling and testing regimes.

7.2 Professional development of QA and MI practitioners

The need for a comprehensive knowledge and understanding of animal welfare is as pressing now as ever and the QA networks enable MINTRAC to assist industry develop competency in this area by:

- identifying professional development courses and workshops that build a comprehensive understanding of animal welfare and how to implement continuous improvement in this area
- lobbying for state funded qualification courses on all aspects of animal welfare including AWO, animal welfare auditing, livestock handling etc

- promote the concept of best practice with both industry and trainers
- work with AMPC to identify research opportunities in this area.

7.2.1 Recommendation 2

It is recommended that a MINTRAC should continue to promote animal welfare awareness and training for MI, QA and operational staff through the network meeting by;

- facilitating AWO and animal welfare auditing
- working with AMPC to identify areas of potential research (eg the use of working dogs at slaughtering establishments)
- liaising with other sectors of the supply chain to ensure compatibility of training activities
- facilitating and encouraging RTOs to conduct PD for industry trainers in animal welfare and livestock handling.

7.3 The changing nature of the demand for QA MI training

It is increasingly apparent that in the future the content of meat inspection training course will have to be amended to meet the changing demands resulting from

- meat safety inspection programs such as AEMIS
- meat inspector employment arrangements
- market access requirements.

In addition, this will require specific delivery strategies to deal with thin markets and regional locations. The delivery of meat inspector and QA training will be this will be an area of ongoing frustration for industry .   RTOs will struggle to effectively meet industry's training needs at an acceptable price because of the difficulties created by:
- the "thin market" nature of industry demand
- barriers to inter-state funding
- decreasing RTO capacity.

7.3.1 Recommendation 3

It is recommended that MINTRAC continue to facilitate via the networks
- the review and modification of meat safety qualifications
- the development and delivery of e-learning solutions to address the delivery issues of any new Units of competency.

7.4 Adapting QA and training programs to accommodate changes in the workforce employed by the meat industry.

One of the ongoing challenges for all levels of management in the meat industry is how to respond effectively to the changing nature of the industry's labour supply. For the QA departments the challenge is how to effectively develop, certify and review operator competency in what is now for many companies a highly transient workforce.

Increasingly corporate customer and importing country requirements involve certifying that certain key operator tasks are performed by competent staff. These staff must have been assessed and certified as competent either through accredited training or structured in-house programs.

QA and training managers attempting to meet these requirements are doing so in a labour environment dominated by the use of casual and "back packer "labour which denies therefore denies the company access to state funded training.

7.4.1 Recommendation 4

It is recommended that MINTRAC should develop a strategy to address the training needs of itinerant workers as dictated by customer and regulatory requirements. In order to achieve this MINTRAC should via the networks

- consult with QA managers to identify and define the specific training needs of non-permanent workers in terms of meeting customer and regulatory requirements
- identify an approach which will most cost effectively address these training needs
- facilitate the development of appropriate materials
- engage with RTOs and company trainers to develop delivery strategies to address the identified training requirements.