



final report

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Training and professional development strategy to support 2019 changes to post-mortem inspection practice

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Executive summary

The current Australian system of post-mortem inspection and disposition of meat is conducted according to the requirements of AS 4696:2007 *Australian Standard for Hygienic Production and Transportation of Meat and Meat Products for Human Consumption* (Australian Meat Standard) (Anon 2007). Recently a major reform agenda was driven by the red meat and pork industries to modernise some of the traditional inspection techniques in light of improvements in animal health, developments in inspection techniques overseas and the findings of research conducted in Australia.

Schedules 2 and 3 of AS 4696 *Australian Standard for Hygienic Production and Transportation of Meat and Meat Products for Human Consumption*, covering post-mortem inspection practice and disposition of carcasses and carcass parts were going to be changed with the intended date of publication being mid-2019. The standard has not yet been changed, and currently the changes have been released as alternative techniques, *Guideline 2020:1. Post-Mortem Meat Inspection – Alternative techniques to Schedule 2 and 3 of AS 4696:2007*. The Guidelines only apply to domestic abattoirs, and have already been adopted in several jurisdictions. It is anticipated that all states and territories will eventually implement the alternative techniques.

It is important that industry trainers, Registered Training Organisations (RTOs), employers of meat inspectors and Australian Government Authorised Officers are aware of the changes being made and that the changes are incorporated into work instructions and training materials. The objectives of this project were to provide information to these industry stakeholders, update existing training and assessment materials to reflect these changes, create additional support materials, as well as providing the trainers who deliver meat inspection training with the scientific underpinning the changes.

Even though approved equivalent alternative post-mortem inspection procedures to AS 4696 have already been implemented in domestic establishments in some jurisdictions, this project could not be fully implemented with stakeholders working in or with export establishments, so the project has focused on providing information and training to domestic stakeholders.

MINTRAC conducted a range of industry engagement and training activities including the Meat Inspection and Quality Assurance Conference, AMPC Industry Network meetings, a trainer workshop held in Adelaide, as well as webinars, two of which were live and one recorded for continued access. MINTRAC also updated six sets of existing training and assessment support materials and developed an eLearning resource to assist the implementation of the alternative techniques. The MINTRAC website now houses seventeen Fact Sheets which provide detailed explanations of the alternative techniques and the science that underpins them.

In total, 178 individual industry stakeholders were engaged in the project. The feedback collected from training activities was almost entirely positive, indicating that the training met the goal of informing trainers and industry of the alternative techniques and how they apply to post-mortem inspection and disposition practices. The eLearning program, Fact Sheets, recorded webinar and other resources from the project will continue to be promoted by MINTRAC and accessed by more stakeholders as the alternative techniques are implemented in other jurisdictions. It is recommended that these resources be updated once more when the Australian Standard is formally changed.

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1 Background

The current Australian system of post-mortem inspection and disposition of meat is conducted according to the requirements of AS 4696:2007 *Australian Standard for Hygienic Production and Transportation of Meat and Meat Products for Human Consumption* (Australian Meat Standard) (Anon 2007). Recently a major reform agenda was driven by the red meat and pork industries to modernise some of the traditional inspection techniques in light of improvements in animal health, developments in inspection techniques overseas and the findings of research conducted in Australia.

Schedules 2 and 3 of AS 4696 *Australian Standard for Hygienic Production and Transportation of Meat and Meat Products for Human Consumption*, covering post-mortem inspection practice and disposition of carcasses and carcass parts were going to be changed with the intended date of publication being mid-2019.

It is important that industry trainers, Registered Training Organisations (RTOs), employers of meat inspectors and Australian Government Authorised Officers are aware of the changes being made and that the changes are incorporated into work instructions and training materials. The objectives of this project were to provide information to these industry stakeholders, update existing training and assessment materials to reflect these changes, the creation of additional support materials, as well as providing the trainers who deliver meat inspection training with the scientific underpinning the changes.

At the beginning of the project it was anticipated that the changes to AS 4696:2007 Australian Standard for the Hygienic Production and Transportation of Meat and Meat Products for Human Consumption (known as AS 4696 or the Australian Standard) would be published in mid- to late 2019. However during discussions with representatives the Department of Agriculture and the Australian Meat Regulators Group (AMRG) in early September it became apparent that these changes would be unlikely to be passed before early 2020.

Even though approved equivalent alternative post-mortem inspection procedures to AS 4696 have already been implemented in domestic establishments some jurisdictions, this project could not be fully implemented with export stakeholders such as Australian Government Authorised Officers (AAOs) and Registered Training Organisations (RTOs) working in export establishments.

Accordingly, MINTRAC requested that the milestone date for the final report be extended 30 June 2020. Meat & Livestock Australia agreed to the request and a contract variation was made.

At the time of writing this report the Australian Standard itself still has not been changed. Under the equivalence principle in the Standard, AMRG have released the Guideline 2020:1. Post-Mortem Meat Inspection – Alternative techniques to Schedule 2 and 3 of AS 4696:2007 in February 2020. (See Appendix 1). The Guidelines have already been adopted in several jurisdictions, and the expectation is that all states and territories will eventually implement the alternative techniques so the project has focused on providing information and training about these to domestic stakeholders.

The AMRG comprises representatives from each state/territory food regulatory agency, Food Standards Australia New Zealand (FSANZ) and the Australian Government Department of Agriculture. The AMRG provides a conduit between industry and meat regulatory bodies in regard to

the development and revision of food safety regulatory tools and guidance material which support Australian meat industries as well as promoting consistency across jurisdictions of issues management regarding food regulatory matters in the meat sector.

2 Project objectives

This project had the following objectives:

1. provide information to industry about the changes to AS 4696
2. update training and assessment materials for post-mortem inspection
3. create audio-visual support materials
4. provide an update on the changes and the scientific underpinning for the changes to Registered Training Organisation trainers.

3 Methodology

3.1 Project planning and initial project activities

From the outset MINTRAC was involved in discussions with the Department of Agriculture and the AMRG throughout the project about the AS 4696, as well as meetings and a workshop for On-Plant Veterinarians (OPVs) regarding the changes to Schedules 3 and 3 of AS 4696.

In September MINTRAC were involved in a teleconference to discuss the seventeen draft Fact Sheets that the Department have developed to explain the changes and where these documents should be housed. It was agreed that MINTRAC would be the appropriate organisation with which to house these Fact Sheets and provide access to appropriate industry stakeholders (including RTOs and AAOs). It was also agreed that that MINTRAC would prompt the Department annually to review them and determine if any changes or updates were required.

Dr Andrew Pointon, of AP food Integrity, was also in regular contact with MINTRAC throughout the project and at the beginning generously provided a great deal of background information including copies of presentations slides for the On-Plant Veterinarians Professional Development (OPV PD) weekend workshops, and publications relevant to the project.

On 12 October 2019 four MINTRAC staff members attended the Sydney OPV PD workshop in Sydney where Andrew presented on the changes to the Australian Standard, the implementation plan and the underpinning science behind the changes.

These planning activities allowed MINTRAC Project Officers to develop their understanding of the changes and the science that underpin them and to be able to identify what information will need to be provided to trainers and AAOs, which current MINTRAC training materials would need to be revised as well as what the proposed e-learning materials will need to cover and how they can be developed.

MINTRAC then began introducing the project to stakeholders and providing an overview of the project objectives. The September Issue of MINTRACKer, MINTRAC's monthly newsletter featured an article on this project (the five MINTRACKer articles from September 2019 to May 2020 are included

as Appendix 2) and invited expressions of interest from anyone interested in taking part in any workshops or webinars. The newsletter continued to provide project updates at regular intervals as well as notices about the workshop and webinars.

3.2 Industry engagement and training activities

To provide advice to the industry about the alternative techniques MINTRAC undertook a number of industry engagement activities. The following industry engagement and training activities occurred during this project.

3.2.1 AMPC Industry Network Meeting presentations

MINTRAC presented on the project at the following Australian Meat Processor Corporation (AMPC) Industry Network Meetings:

- 7 August 2019, Brisbane Queensland
- 28 August 2019, Adelaide South Australia
- 18 September 2019, Melbourne Victoria
- 16 October 2019, Bunbury Western Australia
- 16 February 2020, Wagga Wagga New South Wales
- 26 February 2020, Melbourne Victoria

MINTRAC provided an overview of the project objectives and broadly outlined the alternative techniques for Schedules 2 and 3, as well as alerting industry to the fact that there would be a training workshop, webinars and training materials developed to support the implementation of the changes.

The presentation slides for the 2019 meetings are included as Appendix 3, the presentation slides for the 2020 meetings is Appendix 4. These meetings were attended by both industry and trainers. More meetings were planned for post-February, however these were cancelled due to the coronavirus pandemic.

3.2.2 MINTRAC Meat Inspection and Quality Assurance Conference

There were two presentations featuring the changes to AS 4696 at the Meat Inspection and Quality Assurance Conference. The Conference Program has been included as Appendix 5. Dr Samantha Allan from the Department of Agriculture presented on the changes and implementation plan Sharon Fitzgerald, Senior Project Officer at MINTRAC gave a short presentation on the work MINTRAC has been doing on this project. Copies of the presentations are included as Appendices 6 and 7 respectively. This conference was attended by 145 people from across the industry, including processors and training organisations. A list of attendees is included as Appendix 8. Twenty-six different plants (two of which are enterprise RTOs), one third party provider of meat inspectors, and seven RTOs were in attendance at the MI&QA Conference.

In addition to the conference presentation MINTRAC staff were also able to have informal conversations about this project with a number of RTOs. These conversations included gauging their interest in attending a face-to-face workshop and where the most central location for this would be.

The MINTRAC National Training Conference was planned for March 2020 and a presentation on the alternative techniques was planned, however the conference was cancelled due to the coronavirus pandemic.

The next Meat Inspection and Quality Assurance Conference is scheduled from 21 and 22 October, at this stage it may be held as an online event. However it is held there will be a presentation on the alternative techniques and the outcomes of this project.

3.2.3 Training workshop – 20 February 2020, Adelaide South Australia

Andrew Pointon was engaged by MINTRAC to deliver a one-day workshop which was held in Adelaide on Thursday 20 February 2020. The workshop was attended by 15 people from industry, mainly training providers. Apologies were received from three people who registered to attend but were unable to make it.

A signed attendance register is included as Appendix 9. The workshop attendees accounted for five RTOs in Australia who deliver meat safety training, and apologies were received from another RTO. There are 14 RTOs in total that are registered to deliver the *Certificate III and/or Certificate IV in Meat Processing (Meat Safety)*.

The *Certificate III in Meat Processing (Meat Safety)* is the minimum qualification required for meat inspectors working in domestic abattoirs, while inspectors working in export plants must hold the *Certificate IV in Meat Processing (Meat Safety)*.

Workshop attendees were provided with the following materials:

- Andrew's PowerPoint slides (included as Appendix 10)
- The seventeen draft Fact Sheets
- A number of research publications considered relevant for the audience

These other materials have not been included as appendices as they are very large documents and the versions of the Fact Sheets are now out of date, however copies can be provided by MINTRAC if required.

The workshop was very successful with lots of interaction and discussion. The workshop was recorded on an iPad for use as a possible training resource, however several of the slides had incorrect or since updated information, so they are not recommended without substantial editing. They can be made available to MLA on request. An evaluation form (Appendix 11) was handed out to participants and most returned a completed form. Unfortunately the completed forms were lost en-route from Adelaide back to Sydney so their results are not available. However, Sharon Fitzgerald from MINTRAC, Andrew Pointon and David Cusack from AMRG did review the responses at the conclusion of the workshop prior to leaving and all feedback was positive with the participants having indicated they had received the information they were expecting at the workshop and were happy with how the workshop was conducted. To prevent this loss from happening again the webinar evaluations were conducted online via a Survey Monkey link, and any future workshops MINTRAC conducts we will include an online evaluation method rather than paper-based.

The flyer used to promote the workshop is also included as Appendix 12.

3.2.4 Webinars

Two one-hour webinars were held for those stakeholders who were unable to attend the workshop. These were held on 8 April and 29 April and facilitated by Clive Richardson of MINTRAC with assistance from Sharon Fitzgerald. The webinar slides are included as Appendix 13. The webinars were recorded and a recording and copies of the slides are available on the MINTRAC website for anyone unable to attend a live event.

The first webinar was attended by 18 people, and the second was attended by 22. The attendance lists are included as Appendix 14.

Evaluations of the webinars were conducted through Survey Monkey, and the results of these surveys are included as Appendix 14 and 15. The majority of the feedback was positive.

3.3 Training resources

One of the objectives of this project was to develop new resources and update existing materials to support the implementation of these alternative techniques to Schedules 2 and 3 of the Standard.

Existing MINTRAC training and assessment support materials for six units of competency related to post-mortem inspection and disposition were reviewed and updated, an eLearning resource was developed to explain the changes, and recording and presentation slides from the webinars were also turned into training resources.

Fact Sheets had been developed by the organisations involved in the research projects which underpinned the changes, including AMRG, DAWE and Andrew Pointon, and it was decided that the most appropriate place to house these was the MINTRAC website. Their currency would be managed by AMRG.

More detail about the training resources that have been developed as an outcome of this project is included in Results section.

4 Results

4.1 Industry individuals and companies who have received training

The workshop, although intended primarily for trainers had three attendees from industry.

145 people attended the Meat Inspection and Quality Assurance National conference (see Appendix 8 for a full list of delegates and the companies they come from, and appendices 3 and 4 for the PMI changes presentations included in the conference program). Nine of these participants were from RTOs (see next section) therefore 136 industry individuals attended the conference and were able to access the two PMI alternative techniques presentations included in the program.

39 industry individuals participated in the webinars, representing 22 companies. Appendix 14 shows the list of total attendees and the companies they come from for each of the webinar.

The eLearning resource has only just been completed so at the time of writing this report no one has yet completed this training. MINTRAC's website will be able to automatically track how many people have accessed the program and can provide this information to MLA at any time on request.

4.2 Trainers and RTOs who have received training

The workshop attendees accounted for five RTOs in Australia who deliver meat safety training, and apologies were received from another RTO. There are thirteen RTOs in total across Australia that are registered to deliver the *Certificate III and/or Certificate IV in Meat Processing (Meat Safety)*. The five who attended the workshop represented some of the larger RTOs, with Response Learning, TAFE SA and Food Safety Alliance all having scope to deliver on a national basis, not just in the state in which they are located. Two other RTOs are located in Western Australia which is a long distance to travel for a workshop. One of the WA RTOs attended a webinar. Appendix 9 has a complete list of all trainers and industry stakeholders who attended this workshop. There were seven trainers at the workshop.

Nine training representatives from eight RTOs attended the Meat Inspection and Quality Assurance National conference (see Appendix 8 for a full list of delegates, and appendices 3 and 4 for the PMI changes presentations included in the conference program). These included three other RTOs, as well as one processing companies which also have enterprise RTOs attached that were not able to make it to the Adelaide workshop. All five of these RTOs are also registered to deliver the *Certificate III and/or Certificate IV in Meat Processing (Meat Safety)*.

Four RTOs participated in the webinars. Appendix 14 shows the list of total attendees for each of the webinar. In total five trainers attended the webinars.

The eLearning resource has only just been completed so at the time of writing this report no trainers have yet completed this training. MINTRAC's website will be able to automatically track how many people have accessed the program and can provide this information to MLA at any time on request.

Of the total thirteen RTOs with scope to deliver meat safety training only three RTOs were not reached by at least one industry engagement activity associated with this project. It should be noted that two of the RTOs that were not at all engaged are enterprise RTOs and both of those plants are export registered.

Overall the activities represent a total of 21 trainers in total who were engaged through the project.

The recorded webinar and PowerPoint slides will continue to be available on the MINTRAC website, as well as the Fact Sheets, AMRG Guideline, MINTRAC eLearning program and MINTRAC training and assessment materials. These will be promoted regularly through social media, the MINTRACKer newsletter and MINTRAC presentations at industry and training forums.

4.3 Updated training and assessment materials

MINTRAC has developed and maintains a suite of training and assessment support materials for almost all of the units in the *AMP Australian Meat Processing Training Package*, including many of the units that are imported from other Training Packages into meat industry qualifications. These materials are used by RTOs to deliver training and assessment of qualifications, skill sets and units

within the *AMP Training Package*. Part of the maintenance of these materials requires that materials are periodically updated in response to regulatory changes, changes to industry practices, technological advancements, changes to terminology and other reasons that might cause training materials to become out of date. Where these changes are minor the materials can be updated without the support of funding, however these alternative techniques represented significant changes to multiple sets of training materials, therefore one of the project objectives was to update any materials which covered units related to post-mortem inspection and disposition.

Six sets of the MINTRAC Training and Assessment Materials which cover six units of competency from the *Australian Meat Processing Training Package* were identified as units which would need to be updated as a result of the approved alternative techniques. These are:

- AMPA3119 Apply food animal anatomy and physiology to inspection processes
- AMPA3120 Perform ante and post-mortem inspection – Ovine and Caprine
- AMPA3121 Perform ante and post-mortem inspection – Bovine
- AMPA3122 Perform ante and post-mortem inspection – Porcine
- AMPA402 Oversee plant compliance with the Australian standards for meat processing
- AMPA3047 Prepare and present viscera for inspection.

The MINTRAC Training and Assessment Materials typically only have one version per unit, and at the beginning of the project when it was anticipated that the Australian Standard would be changed it was planned for the single version of each unit be updated. It became apparent that for some of these unit materials there would be a need for a new version to be created and for this version to be specific to domestic processing plants, as they are the only establishments at the moment which are able to implement the 14 alternative techniques. The units where there is not a separate domestic version are *AMPA402 Oversee plant compliance with the Australian standards for meat processing* and *AMPA3119 Apply food animal anatomy and physiology to inspection processes*.

The final copies of all the materials which have been updated are include as the following Appendices:

- Appendix 17 – AMPA402 Oversee plant compliance with the Australian standards for meat processing Training and assessment support materials
- Appendix 18 – AMPA3047 Prepare and present viscera for inspection (domestic plants only) Training and assessment support materials
- Appendix 19 – AMPA3119 Apply food animal anatomy and physiology to inspection processes Training and assessment support materials
- Appendix 20 – AMPA3120 Perform ante and post-mortem inspection – Ovine and Caprine (domestic plants only) Training and assessment support materials
- Appendix 21 – AMPA3121 Perform ante and post-mortem inspection – Bovine (domestic plants only) Training and assessment support materials
- Appendix 22 – AMPA3122 Perform ante and post-mortem inspection – Porcine (domestic plants only) Training and assessment support materials

Clive Richardson, Senior Project Officer at MINTRAC who is also a former meat inspector and also worked as a training manager for the Australian Quarantine and Inspection Services (AQIS) reviewed each of the materials and created the updated versions which can now be used by RTOs delivering meat inspection training in domestic establishments.

All copies of the written materials contain the following acknowledgement on the first page within the copyright statement *“These materials were updated in 2020 with the assistance of funding provided by Meat and Livestock Australia (MLA).”*

During the project MINTRAC conducted an inventory and gap analysis of the images from the AMPC Image Library, which is a database of photographs showing conditions, diseases, abnormalities and other images relevant to the meat inspection role. This inventory is included as Appendix 23. The gaps identified some areas where there are few or no images, such a CLA in goats, and goat images in general, pig images in general. The project considered how additional images, might be obtained and approached a number of companies and experience meat inspectors to ask if they had any images related to the conditions. A few responded with some additional images, however none really covered the gaps identified. Site visits were not possible from mid-March, and understandably many companies are typically reluctant anyway to allow visitors to come on site and take photographs. Even if visitors are allowed to take photos chain speeds, close quarters, hygiene and sanitation issues as well as the presence of water and the different temperature conditions make photography difficult. Yet another challenge is that improved herd health means that many conditions are not often seen, so opportunities to take photos can be few and far between.

One of the project recommendations is to conduct further work to gather more comprehensive pictures and videos to support the alternative techniques. It should also be noted that the training and assessment materials as well as the eLearning resource will need to again be updated when they can be applied in export registered establishments.

4.4 Audio visual materials developed

The webinars mentioned in previous sections of this report were recorded and the clearest version is available on the MINTRAC website (<https://www.mintrac.com.au/page.asp?p=177>) for those who were not able to take part in a live webinar or the face-to-face workshop.

An eLearning program has been developed and house on the MINTRAC website (<https://www.mintrac.com.au/page.asp?p=177>) . The resource is based largely on the information contained in the Fact Sheets and provides users first with an overview of the review of AS 4696 and rationale for the change. Then it will include an explanation of the risk-based principles in Schedule 2, with a section then for each of the seven alternative procedures, and then an explanation of the changes to Schedule 3 and a section for each of the seven revised judgement criteria. Wherever possible we have tried to include as many images as available as well as minimising the use of excessive amounts text and allow for lots of areas of white space. The resource also contains a number of multiple choice and true/false questions to allow participants to check their knowledge as they move through the program. As well the resource also includes ‘pop-out’ sections where key terms and principles can be explained in more detail and links to additional resources such as the published research reports for those wanting more information and detail.

Users will need to enrol in the eLearning program with MINTRAC, once they have completed MINTRAC can then issue them with a Certificate of Completion.

The resource has been developed using a program that is relatively simple to use and edit and which is compatible with computers, tablets and mobile devices.

The users of this resource will also be encouraged to provide feedback to MINTRAC to ensure the materials are as accurate and current as possible, as we do with all resources we develop. If any issues are identified MINTRAC will be able to update the resource.

4.5 Plan for on-going communication and engagement with industry and trainers

The Fact Sheets, eLearning program, recorded webinars, presentation slides and updated training and assessment materials will continue to be promoted through the following methods:

- Monthly articles in the MINTRACker newsletter
- Email alerts to MINTRAC network mailing lists for training and HR managers, trainers, QA managers and other stakeholders
- Presentations at industry forums such as the AMPC network meetings
- Notifications in other industry publications such as AMIC's Prime Cuts.

The usage of the eLearning program will be tracked automatically through the eLearning platform to determine the level of industry engagement. This information can be made available to MLA at any time upon request.

As mentioned previously, MINTRAC will encourage stakeholder feedback on any of the resources to ensure we can maintain their currency and accuracy as much as possible.

4.6 Effectiveness of industry engagement and adoption of the changes

The alternative techniques at this point in time are only applicable to domestic abattoirs. In export plants the amendments set out in the guidelines will apply only after the standard AS4696:2007 is formally amended. However, for export plants even after standard is formally modified the matter of importing country requirements means that an equivalence argument will have to be had on a market by market basis before the changes to Schedule 2 and 3 can be implemented.

In the domestic processing industry the alternative techniques have only been implemented in New South Wales, Western Australia, South Australia and Victoria. The remaining jurisdictions have yet to introduce the alternative techniques.

Given that there are not a large number of RTOs and trainers currently delivering meat safety training them the coverage of the engagement can be considered to be fairly comprehensive. Of the thirteen RTOs with scope to deliver meat safety qualifications at Certificate III and Certificate IV levels three of them are enterprise RTOs which are part of or associated with export registered plants. Nine of the remaining ten RTOs were all engaged by the project on some level, and the one that was not engaged in this project is located in WA, which may account for the lack of engagement. This RTO is regularly in contact with MINTRAC and receives the MINTRACker newsletter, so should receive information about the availability of the recorded webinars, fact sheets and eLearning program.

In total 178 individual industry stakeholders were engaged in the project. These individuals were from domestic abattoirs, a few export plants, state departments of primary industry and state

regulatory authorities. The feedback collected, particularly from the webinars, was almost entirely positive, indicating that the training met the goal of informing trainers and industry of the alternative techniques and how they apply to post-mortem inspection and disposition practices.

As mentioned previously the eLearning resource has only just been completed so at the time of writing this report no one has yet completed this training. The Fact Sheets have also only recently been made available, so it is not yet possible to determine the full effectiveness of industry engagement.

5 Discussion

5.1 Achievement of the project objectives

This project had the following four objectives, all of which can be considered to have been achieved.

1. provide information to industry about the changes to AS 4696
2. update training and assessment materials for post-mortem inspection
3. create audio-visual support materials
4. provide an update on the changes and the scientific underpinning for the changes to Registered Training Organisation trainers

5.1.1 Provide information to industry about the changes to AS 4696

Throughout the course of the project MINTRAC presented information to a broad range of meat industry stakeholders via:

- Six industry network meetings
- One national conference
- One dedicated one-day face-to-face workshop designed for trainers
- Two webinars
- Five articles and workshop/webinar reminders in the monthly MINTRACker newsletters

5.1.2 Update training and assessment materials for post-mortem inspection

Six MINTRAC training and assessment support materials were reviewed and updated. These updates will be provided to RTOs who use the MINTRAC materials.

5.1.3 Create audio-visual support materials

An eLearning program has been created and is available for anyone who wants to find out more about the alternative techniques. This resource is designed to be a visual resource with quizzes included so participants can check their understanding.

The webinars have been recorded and the recording is available through MINTRAC.

Two website pages have been created, one to house the Fact Sheets for the alternative techniques, and another to house the webinar slides and recordings.

5.1.4 Provide an update on the changes and the scientific underpinning for the changes to Registered Training Organisation trainers

The workshop was designed especially for trainers to provide them with a detailed understanding of the alternative techniques and their implications for training meat inspectors and meat safety officers. They were also kept updated throughout the project about the changes via network meetings, the conference and MINTRACer newsletter articles.

The Fact Sheets which are now available on the MINTRAC website (<https://www.mintrac.com.au/page.asp?p=175>) provide a great deal of background information on the scientific research that has underpinned the alternative techniques. These have been incorporated into the eLearning program as well as the updated training and assessment materials.

5.2 Successes and challenges of the project

5.2.1 Challenges

Although the project met the objectives that were set at the beginning it was not without challenges and lessons to be learned for future projects.

Initially much of the industry and RTO engagement was planned to occur through MINTRAC Training Forums which were planned to be held in each state across Australia. Unfortunately, these did not go ahead due to lack of registrations. Andrew Pointon offered to deliver a workshop designed specifically for trainers in a central location, although other stakeholders were also welcome. The decision to hold this in Adelaide was for several reasons, it is where Andrew is based, there are excellent conference facilities right at the airport, and the location was relatively central to the eastern and western states. The workshop was very well received, with positive feedback from all in attendance.

A National Training Conference was also planned and a session on the PMI changes would have been included, however the coronavirus pandemic affected this and it was cancelled. Fortunately, the workshop had already occurred by this time, so a face-to-face training opportunity had been available.

At the beginning of the project it was anticipated that the Australian Standard AS 4696:2007 would be changed, and thus the information and training would be relevant for export as well as domestic abattoirs. However, the standard did not change and instead alternative techniques were implemented domestically under the equivalence provision in the Standard. This meant that the materials developed and training provided are currently relevant only for domestic plants. For some of the MINTRAC training and assessment materials it effectively meant that there are now two versions – one for domestic abattoirs (updated with the PMI changes) and one for export plants (unchanged). If not managed carefully this could lead to confusion for trainers and training providers

if they are not using the correct version. It also means that the eLearning program and other materials available through MINTRAC will need to be updated when the Standard does change.

5.2.2 Successes

As mentioned above, the workshop was a success. Overall the engagement activities had good levels of attendance and representation from a significant portion of industry and RTOs. Attendance may have been slightly higher from industry and from RTOs if the changes applied to export as well as domestic plants.

The webinars were also successful and very well timed. Luckily the workshop occurred before the coronavirus pandemic caused travel and public gathering restrictions, and webinars had always been planned to be held in April. Participants found the information provided to be clear and covered the fourteen changes well. The platform used (Zoom) allowed for discussion and interaction at the end of each webinar, and a recording is now available on the MINTRAC website.

6 Conclusions/recommendations

The recommendations moving forward this project are as follows.

6.1 Recommendations

6.1.1 More images of conditions should be produced to support training

More images of conditions are needed for to better support the alternative techniques, particularly around acute, resolving and chronic conditions for better implementation of Schedule 3 alternative techniques.

MINTRAC does maintain an image library which we endeavour to keep updated as much as possible, however it is difficult obtain pictures of conditions for a number of reasons:

- improved animal health makes their occurrence in abattoirs less and less common
- chain speeds and space restrictions do not allow for inspectors or others to easily take photos
- they are difficult to label correctly with a confident diagnosis of the condition, especially when taken by someone without veterinary qualifications
- access to abattoirs at the moment is restricted by the current pandemic situation.

MINTRAC would recommend that future industry projects be considered where images and video could be gathered and with the assistance of an expert panel correctly labelled.

6.1.2 MINTRAC should continue to house the Fact Sheets, with currency of content to be maintained by the AMRG

It is recommended that MINTRAC continue to house the Fact Sheets developed to support the alternative techniques Guidelines and promote their use by industry. Their currency will need to be

maintained by the AMRG, and MINTRAC is happy check in with the AMRG at least annually to enquire about whether the fact sheets require an update or not.

6.1.3 MINTRAC should continue to promote the uptake of the new and updated training resources

MINTRAC will continue to make the eLearning program, recorded webinars and training and updated assessment materials available to meat inspection staff, registered training organisations providing meat inspection training, third party providers of meat inspectors. As with almost all materials developed by MINTRAC feedback will be recorded and the regulatory environment monitored to ensure these materials are updated as required. Where these are minor updates they can be made without the need for additional project funding.

6.1.4 MINTRAC should undertake a new project to update materials for export plants when the Standard is changed

When the Australian Standard is eventually updated and changed and Department of Agriculture Water and Environment can implement any changes to post-mortem and inspection techniques on export registered abattoirs there will be a need to update the training and assessment materials and eLearning program to ensure they are relevant for export plants. The review and updating of these materials, and communication of the changes to this sector of the meat industry would require additional project funding.

7 Key messages

The key message from this project are as follows.

- This project has successfully provided information nationally about the alternative techniques so that most Registered Training Organisations delivering training on domestic abattoirs should by now be aware of the alternative techniques for post-mortem inspection and disposition.
- Most of the domestic abattoirs should also be aware of the alternative techniques.
- There are a number of new and updated resources in written, audio and online formats now available to support the implementation on these alternative techniques.
- MINTRAC will continue to promote the materials to the domestic processing industry and is well positioned to do the same for export establishments when the Australian Standard is changed.

8 Bibliography

Anon (2007). Australian Standard for Hygienic Production and Transportation of Meat and Meat Products for Human Consumption. Food Regulation Standing Committee Technical Report Series 3. AS4696:2007. Standards Australia.

Anon (2020) Australian Meat Regulators Group Guideline 2020:1. Post-Mortem Meat Inspection – Alternative techniques to Schedule 2 and 3 of AS 4696:2007.

Fact Sheets that support the alternative techniques – available on the MINTRAC website at: <https://www.mintrac.com.au/page.asp?p=175>

9 Appendices

The following supporting documents have been included as appendices to this report:

- Appendix 1 – AMRG Guideline 2020 Alternative techniques guideline
- Appendix 2 – PMI articles in MINTRACker newsletter
- Appendix 3 – MINTRAC presentation at AMPC network meetings – June - December 2019
- Appendix 4 – MINTRAC presentation at AMPC network meetings – January - March 2020
- Appendix 5 – MI&QA Conference Program
- Appendix 6 – MI&QA Conference presentation – Sam Allan
- Appendix 7 – MI&QA Conference presentation – Sharon Fitzgerald
- Appendix 8 – 2019 MI&QA attendee list
- Appendix 9 – Adelaide workshop attendance list
- Appendix 10 – Adelaide workshop PowerPoint slides
- Appendix 11 – Adelaide workshop evaluation form
- Appendix 12 – Adelaide workshop flyer
- Appendix 13 – PMI webinar slides April 2020
- Appendix 14 – Attendance lists alternative techniques webinars
- Appendix 15 – Evaluation results – webinar 8 April 2020
- Appendix 16 – Evaluation results – webinar 29 April 2020
- Appendix 17 – AMPA402 Oversee plant compliance with the Australian standards for meat processing Training and assessment support materials
- Appendix 18 – AMPA3047 Prepare and present viscera for inspection (domestic plants only) Training and assessment support materials
- Appendix 19 – AMPA3119 Apply food animal anatomy and physiology to inspection processes Training and assessment support materials
- Appendix 20 – AMPA3120 Perform ante and post-mortem inspection – Ovine and Caprine (domestic plants only) Training and assessment support materials
- Appendix 21 – AMPA3121 Perform ante and post-mortem inspection – Bovine (domestic plants only) Training and assessment support materials
- Appendix 22 – AMPA3122 Perform ante and post-mortem inspection – Porcine (domestic plants only) Training and assessment support materials
- Appendix 23 PMI Image Inventory