



# final report

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## **MINTRAC environment managers network**

### **Milestone 2 report**

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## Contents

|  | Page |
|--|------|
| 1 Milestone requirements .....   | 3    |
| 2 Background .....   | 3    |
| 3 Milestone requirement 1: Report on scheduled v actual network meetings and professional development activities ..... | 4    |
| 4 Milestone requirement 2: Summary of stakeholder consultation and involvement in networks .....                       | 6    |
| 4.1 The formal evaluation of the network .....   | 7    |
| 4.2 Outcomes of the formal evaluation .....  | 7    |
| 5 Milestone requirement 3 Summary of issues raised, initiatives and outcomes of the network for the year .....         | 8    |
| 6 Milestone requirement 4 Recommendations for the coming year .....  | 9    |
| 7 List of Attachments .....  | 11   |
| 7.1 Attachment 1 .....   | 12   |
| 7.2 Attachment Two: Formal Evaluation of the Environment Managers Network .....  | 14   |

## 1 Milestone requirements

:

- Final summary of scheduled v actual network meetings and professional development activities
- Summary of stakeholder consultation and involvement in networks
- Summary of issues raised, initiatives and outcomes of the network for year
- Recommendations for the coming year.

## 2 Background

The Environment network was first established in 2006. Since that time it has steadily grown, especially with the current Federal Government strategies relating to climate change and their likely impact on the meat industry. A state based network of researchers, regulators, trainers and practitioners is now well established and represents an efficient method of distribution of new information. It also gives environment managers, researchers and regulators a very useful forum to explain, explore and discuss new issues and innovations.

The network is now closely aligned with the National Environmental Committee and therefore consistently addresses the issues and priorities of that Committee.

The two main functions of the network are to:

- organise a limited number of professional development workshops delivered in selected regional centres facilitated by a technical consultant
- develop communication channels between the various parties involved (e.g. email and mail-out lists, web page notice boards).

Emphasis during 2009/10 will feature increasing the network's interaction with

- state-based environment regulators
- creating opportunities for inter industry involvement with such organisations as Dairy Australia
- companies involved with water and waste water technologies
- cross industry experiences such as those associated with water savings and cogeneration
- federal government agencies such as the Department of the Environment Water, Heritage and the Arts and Treasury as they implement the carbon trading regulations
- meat processing companies that have successfully implemented environment based projects such as methane capture from waste water ponds, composting initiatives and the off-site distribution of treated waste water.

### 3 Milestone requirement 1: Report on scheduled v actual network meetings and professional development activities

Following on the experience gained in running the environment managers' network MINTRAC has focused on conducting on-site meetings. These site visits give environment managers an opportunity to make face to face contact with company personnel implementing and operating cutting edge technologies. These initiatives address the many of the environmental issues faced by meat processing companies around Australia.

Prior to the site visits the participants meet to discuss the scientific principles that underpin these technologies as well as the economic and regulatory drivers.

These meetings also cover agenda items addressing topical environmental issues such as

- NGER accounting and reporting
- the possible impact of CPRS programs
- Government funding for environment innovation
- The outcomes of MLA projects
- Opportunities for co-generation
- Energy generation using renewable energy sources

The site visits have been somewhat difficult to organise however companies now seem more willing to have visitors on site. Similarly industry participation in the meetings is increasing in all States (except Victoria) and in fact there is also increasing interstate participation.

#### **Meeting schedule (July-December 2009)**

| State | Location   | Proposed Venue   | Date   |
|-------|------------|--|--|
| NSW   | Wingham    | Wingham Country Lodge Motel,<br>Country Club Drive Wingham NSW<br>2429 | Tuesday 27<br>October 2009<br><i>POSTPONED</i> |
| WA    | Mandurah   | Custom Composts  | Tuesday 10<br>November 2009                    |
| VIC   | Warnambool | Quest Warnambool<br>15-19 Liebig Street Warnambool VIC<br>3205         | Tuesday 24<br>November 2009                    |
| QLD   | Churchill  | Ipswich  | Tuesday 1<br>December 2009                     |

***Meeting schedule (January-June 2010)***

| <b>State</b> | <b>Location</b> | <b>Venue</b>   | <b>Date</b>   |
|--------------|-----------------|--|---|
| SA           | Murray Bridge   | Big River Pork Pty Ltd   | Thursday 18 February 2010   |
| NSW          | Wingham         | Wingham Country Lodge Motel,<br>Country Club Drive Wingham NSW<br>2429 | Wednesday 24 February 2010  |
| WA           | Bunbury         | Dardunup Butchery Company  | Thursday 22 April 2010  |
| VIC          | Warrigal        | Radfords   | Wednesday 12 May 2010   |
| QLD          | SE Queensland   | Teys Bros at Beenleigh   | Wednesday 19 May 2010   |
| NSW          | Young           | Burrangong Meat Works, Young   | Wednesday 29 April 2010<br>cancelled due to<br>Co going into<br>receivership. |
| SA           | Adelaide        | Adelaide Poultry, Adelaide   | 25 May 2010<br>Postponed to July 2010   |

The program for the meetings was based on the areas of interest that the network meetings had put forward. These covered co-generation, anaerobic pond design and covers, water purification and composting processing plant waste.

## **4 Milestone requirement 2: Summary of stakeholder consultation and involvement in networks**

The major stakeholders in the environment networks are obviously the environment managers from the meat processing companies, the State environmental agencies industry bodies (AMIC, AMPC and MLA) and researchers. The following companies participated in the network meetings this financial year;

Monbeef Pty Ltd  
Wingham Beef Exports Pty Ltd  
Eversons Food Processors  
Cargill Beef Australia  
Churchill Abattoir Management Pty Ltd  
Nippon Beef Exports Pty Ltd  
Bindaree Beef Pty Ltd  
Tey's Bros (Holdings) Pty Ltd  
Thomas Borthwick & Sons (Australia) P/L  
Australian Food Corporation Pty Ltd  
Kilcoy Pastoral Company Pty Ltd  
National Meat Industry Training Advisory Council  
Department of Environment and Resource Management  
Greenmountain Food Processing Pty Ltd  
Symbio Alliance  
Northern Co-operative Meat Co Limited  
Stanbroke Beef Pty Ltd  
Big River Pork Pty Ltd  
Rivalea (Australia) Pty Ltd  
Steam Systems Pty Ltd  
T & R Pastoral Company Pty Ltd  
Goodchild Abattoirs Pty Ltd  
Adelaide Poultry  
Food Safety Services (SA) Pty Ltd  
Primo Abattoir  
Baia da Poultry  
Swift Australia (Southern) Pty Limited  
Midfield Meat International Pty Ltd  
Greenham Tasmania Pty Ltd  
Australian Lamb Company Pty Ltd  
CRF (Colac Otway) Pty Ltd  
R Radford & Sons Pty Ltd  
GBP Exports  
Harvey Industries Group Pty Ltd  
Dardanup Butchering Company  
National Meat Industry Training Advisory Council  
Fletcher International Exports WA Pty Ltd  
WAMCO

Regulatory and Environmental Agencies who have participated this year included  
EPA Victoria

- Sustainability Victoria
- Qld Department of Environment and Resource Management

- NSW Department of Environment and Climate Change

Consultants and technical experts that have presented at the meetings include

- Johns Environmental
- Energetics
- Colley Consulting Pty Ltd
- Golder Associates Pty Ltd
- Steam Systems Pty Ltd
- ProAnd Associates.

Support from industry bodies has been quite good with representatives from the following organisations participating in workshops

- AMIC
- AMPC
- MLA

Participation rates were variable ranging from 24 in Queensland down to 10 in Victoria.

The reasons seem to be associated with the tightening financial situation that some plants find themselves in and the ancillary nature that the environment plays in the responsible manager's total duty statement.

However overall participation is up on the previous years and the site visits are increasingly popular with industry.

#### **4.1 The formal evaluation of the network**

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The formal evaluation of the network was undertaken this year and the results are detailed in Attachment 2. A formal evaluation of the Environment Network was conducted from January - June 2010. As the network has only been operating for four years, it is still early too try and identify the long-term impact of the network, or to assess changes in skills knowledge and attitudes as a result of the network.

Attendance from most companies is at best spasmodic and company environmental roles and responsibilities remain unclear.

Therefore, purpose of the 2010 evaluation was to:

- identify if the networks continue to be of relevance/importance to attendees
- identify if the networks are of value to the industry
- identify strengths of the networks
- identify weaknesses of the networks
- identify industry priorities for the networks.

#### **4.2 Outcomes of the formal evaluation**

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Surveys were distributed to meeting attendees and selected industry stakeholders. Generally, both groups agreed on the benefits of attending the meetings, and their responses suggest that the networks have achieved their stated goal of enhancing the skills and knowledge base of the industry's environment managers.

The combined responses in relation to the value of the networks to industry indicate that the networks achieve their goal of supporting the rapid uptake of technical innovations or the

dissemination of new information from regulators or research agencies and supporting the timely and structured dissemination of R&D outcomes throughout the industry.

Responses indicated a high level of satisfaction with the MINTRAC organisation and conduct of the meetings and generally there was a high level of satisfaction with the content of the meetings.

While there is evidence of some dissemination of information back in the plants, there is an opportunity for attendees to more actively disseminate network information. Most of the industry organisations take an active role in the networks, but there is an opportunity for each of the industry organisations to provide better information about their services and products, and to encourage ongoing interaction with organisational representatives.

There is an opportunity for the networks to work with the industry organisations as they implement the strategic plan and to align emerging role of the environmental managers and identify and provide the appropriate professional development. It is evident that the role of an Environment Manager in meat processing plants is a developing role. There is an opportunity for MINTRAC to continue to identify innovative ways of using technology to collect, collate and distribute environmental information.

## **5 Milestone requirement 3 Summary of issues raised, initiatives and outcomes of the network for the year**

The program for the meetings was based on the areas of interest that the network meetings had brought up. These covered co-generation, anaerobic pond design and covers, water purification and composting processing plant waste. A sample of the various meeting agendas forms Attachment I to this report.

The site visits planned were as follows

| <b>Topic</b>  | <b>Site and State</b>                                     |
|---|---|
| Co-generation: natural gas<br>wood waste<br>methane | Midfields, Vic<br>Nippon, NSW<br>Young NSW (Cancelled)    |
| Anaerobic pond design and covers                    | Churchill, Queensland<br>Young, NSW (Cancelled)<br>DBC WA |
| Water purification systems                          | Big River Pork, SA<br>Radfords Vic<br>Adelaide Poultry SA |
| Odour management                                    | Teyes Bros Qld  |
| Solid waste management                              | Custom Compost WA   |

In addition to encouraging a community of practice to form among environment managers at meat processing plants these same managers have been exposed to some of the most progressive initiatives being taken in the environmental fields.



By featuring the relevant technical experts at the meetings and site visits industry has been able to engage in quite sophisticated interrogation of the designers or installers of the plant or equipment.

The best example of this was our ability to have a representative of Steam Systems at Wingham to talk the meeting through the workings of the wood fired boiler at Wingham and its incredible cost savings.

The ability to promote these site visits with flyers and photos has proved very successful and lead MINTRAC to the development of short documentaries on the four most interesting of the initiatives that were visited.

These documentaries that include film footage and technical details will be available to go on the websites of MLA and AMPC by the end of July 2010. This was not initially a deliverable of this contract but agreement was reached to fund these CDs after the cancellation of two site visits (for reasons beyond MINTRAC's control). The advantage that this format has is that the information gathered on site visits will be able to inform environmental managers across the country.

## **6 Milestone requirement 4 Recommendations for the coming year**

The recommendations listed below are based firmly on the feedback of the extensive survey of stakeholders that was undertaken as part of the network evaluation.

### **Recommendation 1**

The site visits are a success and if carefully structured can tick the boxes for both environment managers and regulators. It will provide an ongoing forum for discussion between these parties as well as enabling a unique networking opportunity for environment managers. In addition they provide a good venue for the roll out of MLA/AMPC research and development findings.

The use of videos to capture the initiatives at the sites being visited may also prove to be highly useful and be an ongoing feature of these networks.

### **Recommendation 2**

The network activities have to be closely tied to the environmental priorities identified by the AMPC's Environment Committee and be part of the dissemination strategy for research and development outcomes.

### **Recommendation 3**

The environment managers' network should feature a national conference that showcases the latest and greatest in technologies and processes to deal with the environmental issues that the industry is involved with.

### **Recommendation 4:**

MINTRAC should actively encourage and support attendees to explore ways of disseminating environmental information at plant level.

There is an opportunity for each of the industry organisations to provide better information about their services and products, and to encourage ongoing interaction with organisational representatives.

**Recommendation 5:**

The industry organisations of MLA, AMIC, AMPC and MINTRAC should explore ways of encouraging attendees to access their services between meetings. It is evident that the role of an Environment Manger in meat processing plants is a developing role. The *Meat Industry Strategic Plan (2010-2015)* lists environment ethical imperatives as its first Strategic Theme. The specific activities identified suggest that it is an industry still defining its responsibilities and responses in these areas, so it is not surprising that the industry is not yet in a position to clearly define the role, required skills and responsibilities of an environment manager.

There is an opportunity for the networks to work with the industry organisations as they implement the strategic plan and to align emerging role of the environmental mangers and identify and provide the appropriate professional development.

## **7 List of Attachments**

**Attachment 1:** MINTRAC Environment Network Meeting agendas

**Attachment 2:** Formal Evaluation of the Environment Managers Network

## 7.1 Attachment 1

### MINTRAC Environment Network Meeting, WA

Date: Tuesday 10 November 2009

Location: Custom Composts

Nambeelup Road, Nambeelup, Western Australia

Time: 10.00am – 4.00pm

### Agenda

| Item no. | Item  | Discussion led by                          |
|----------|---|--|
| 1.       | Attendance  | MINTRAC                                    |
| 2.       | MINTRAC Update <ul style="list-style-type: none"> <li>Professional development</li> <li>Diploma of Meat Processing (enviro unit)</li> </ul> | MINTRAC                                    |
| 3.       | MLA Update <ul style="list-style-type: none"> <li>R&amp;D on pond covers to capture methane</li> </ul>                                      | Liza Du Preez<br>Golder Associates Pty Ltd |
| 4.       | AMIC Update on the CPRS and its impact on industry  | AMIC representative                        |
| 5.       | Greenhouse Gas reporting  | Tracey Colley                              |
| 6.       | Update on NGER  | Tracey Colley                              |
| 7.       | CSIRO Intelligence Refrigeration project  | Tracey Colley                              |
| 8.       | Site visit to Custom Composts and discussion on viable solid waste disposal   | Custom Composts representative             |

**MINTRAC Environment Network Meeting, QLD****Date: Wednesday 19 May 2010****Location: Teys Bros (Holdings) Pty Ltd, 112-148 Logan River Road  
Beenleigh QLD 4207****Time: 10.00am – 4.00pm****Agenda**

| Item no. | Item   | Discussion led by                  |
|----------|--|------------------------------------|
| 1.       | Attendance   | MINTRAC                            |
| 2.       | MINTRAC Update <ul style="list-style-type: none"> <li>Professional development</li> </ul>  | MINTRAC                            |
| 3.       | MINTRAC Environment evaluation   | MINTRAC                            |
| 4.       | Department of Environment and Resource Management update                                   | DERM representative                |
| 5.       | AMIC Update on the CPRS and its impact on industry   | AMIC representative                |
| 6.       | CSIRO Intelligence Refrigeration project   | Tracey Colley                      |
| 7.       | Update on NGER reporting   | Brian Dwyer, Energetics            |
| 8.       | Renewable Energy, replacement of fossil fuels, and LCA Energy Audit                        | Ken Holland, Steam Systems Pty Ltd |
| 9.       | Update on the change from National Packaging Covenant to the Australian Packaging Covenant | Industry                           |
| 10.      | Plant visit to Teys Bros (Holdings) Pty Ltd  | Plant representative               |

## 7.2 Attachment Two: Formal Evaluation of the Environment Managers Network

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# MINTRAC Environment Network

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## Evaluation Report, June 2010



## **Executive summary**

The MINTRAC Environment network was first established in 2006. Since that time it has steadily grown, especially with the Federal Government strategies relating to climate change and their likely impact on the meat industry. A state based network of researchers, regulators, trainers and practitioners is now well established and represents an efficient method of distribution of new information. It also gives environment managers, researchers and regulators a very useful forum to explain, explore and discuss new issues and innovations.

Until 2009-2010, meeting format was typically a five-hour meeting at a central location, with a range of presentations from researchers, regulators and peak bodies, and including discussion items. Attendances using this format were often poor, and in 2009-2010, MINTRAC adopted a new format of having a shortened meeting in a regional location, and then organising a site visit to view an environmental project, usually in the meat industry, but also sometimes in an associated area, for example composting. Using this model, attendances have improved significantly in every state except Victoria.

A formal evaluation of the Environment Network was conducted from January – June 2010. As the network has only been operating for four years, it is still early to try and identify the long-term impact of the network, or to assess changes in skills knowledge and attitudes as a result of the network. Attendance from most companies is at best spasmodic and company environmental roles and responsibilities remain unclear.

Therefore, purpose of the 2010 evaluation was to:

- identify if the networks continue to be of relevance/importance to attendees
- identify if the networks are of value to the industry
- identify strengths of the networks
- identify weaknesses of the networks
- identify industry priorities for the networks.

Surveys were distributed to meeting attendees and selected industry stakeholders.

Generally, both groups agreed on the benefits of attending the meetings, and their responses suggest that the networks have achieved their stated goal of enhancing the skills and knowledge base of the industry's environment managers.

The combined responses in relation to the value of the networks to industry indicate that the networks achieve their goal of supporting the rapid uptake of technical innovations or the dissemination of new information from regulators or research agencies and supporting the timely and structured dissemination of R&D outcomes throughout the industry.

Responses indicated a high level of satisfaction with the MINTRAC organisation and conduct of the meetings and generally there was a high level of satisfaction with the content of the meetings. While there is evidence of some dissemination of information back in the plants, there is an opportunity for attendees to more actively disseminate network information.

Most of the industry organisations take an active role in the networks, but there is an opportunity for each of the industry organisations to provide better information about their services and products, and to encourage ongoing interaction with organisational representatives.

There is an opportunity for the networks to work with the industry organisations as they implement the strategic plan and to align emerging role of the environmental managers and identify and provide the appropriate professional development. It is evident that the role of an Environment Manager in meat processing plants is a developing role. There is an opportunity for

MINTRAC to continue to identify innovative ways of using technology to collect, collate and distribute environmental information.

## Summary of recommendations

**Recommendation 1:** That the industry should continue to support the MINTRAC Environment Network.

**Recommendation 2:** That the revised meeting structure proposed by MINTRAC for 2010-2011 be supported, and that MINTRAC continue to explore innovative ways of using technology to communicate and engage with environment personnel in meat processing plants.

**Recommendation 3:** That MINTRAC actively encourage and support attendees to explore ways of disseminating environmental information at plant level.

**Recommendation 4:** That the industry organisations of MLA, AMIC, AMPC and MINTRAC explore ways of encouraging attendees to access their services between meetings.

**Recommendation 5:** That the networks collaborate to align the role of the Environment Manager with industry strategic priorities and identify and implement appropriate professional development opportunities to support that role.

### Introduction

The MINTRAC Environment network was first established in 2006. Since that time it has steadily grown, especially with the Federal Government strategies relating to climate change and their likely impact on the meat industry. A state based network of researchers, regulators, trainers and practitioners is now well established and represents an efficient method of distribution of new information. It also gives environment managers, researchers and regulators a very useful forum to explain, explore and discuss new issues and innovations.

The network is aligned with the National Environmental Committee and therefore consistently addresses the issues and priorities of that Committee through the attendance and representation of AMIC.

Emphasis during 2009/10 featured increasing the network's interaction with

- state-based environment regulators
- companies involved with water and waste water technologies
- those associated with water savings and co-generation
- federal government agencies such as the Dept of the Environment Water,

Heritage and the Arts and Treasury as they implement the carbon trading regulations

- meat processing companies that have successfully implemented environment based projects such as methane capture from waste water ponds, composting initiatives and the off-site distribution of treated waste water.

The proficiency of environmental management personnel in the meat industry is becoming increasingly important in maintaining the 'clean and green' image of the meat industry, with the increasing focus on water consumption efficiency, and with the introduction of the new ISO environmental standards. This expertise can be greatly enhanced and certified by:

- the professional development activities required to facilitate the uptake of new information from regulators and research agencies



- the timely and structured dissemination of R&D outcomes throughout the industry
- the constant update of the training delivered to new practitioners
- the provision of accredited training to improve the number of qualified environmental officers.

The two main functions of the network are to:

- organise a limited number of professional development workshops delivered in selected regional centres facilitated by a technical consultant
- develop communication channels between the various parties involved (e.g. email and mail-out lists, web page notice boards).

The objectives of the MINTRAC Environment networks are focused on enhancing the ability of the industry to manage its environmental responsibilities by enhancing the skills and knowledge base of the industry's environment managers. The networks achieve this by:

- maintaining a state based network of industry environment managers and researchers with formal contacts with regulators
- helping increase the dialogue between industry and the regulators
- facilitating professional development activities to enable environment managers to expand their skills and knowledge bases
- facilitating the necessary workshops required to enable the rapid uptake of technical innovations or the dissemination of new information from regulators or research agencies
- the timely and structured dissemination of R&D outcomes throughout the industry.

Until 2009-2010, meeting format was typically a five-hour meeting at a central location, with a range of presentations from researchers, regulators and peak bodies, and including discussion items. Attendances using this format were often poor, and in 2009-2010, MINTRAC adopted a new format of having a shortened meeting in a regional location, and then organising a site visit to view an environmental project, usually in the meat industry, but also sometimes in an associated area, for example composting. Using this model, attendances have improved significantly in every state except Victoria.

## **Evaluation strategy 2009-10**

A formal evaluation of the Environment Network was conducted from January – June 2010. As the network has only been operating for four years, it is still early to try and identify the long-term impact of the network, or to assess changes in skills knowledge and attitudes as a result of the network. Attendance from most companies is at best spasmodic and company environmental roles and responsibilities remain unclear.

Therefore, purpose of the 2010 evaluation was to:

- identify if the networks continue to be of relevance/importance to attendees
- identify if the networks are of value to the industry
- identify strengths of the networks
- identify weaknesses of the networks
- identify industry priorities for the networks.

It was intended that three groups would be surveyed:

1. attendees (Plant employees)
2. non-attendees
3. stakeholders

**Attendees**

A questionnaire was handed out at every network meeting to be held between January and May 2010. Attendees were advised that responses would be anonymous, and wherever possible questionnaires were collected at the end of the meeting. In the last week of May, a 'last chance' opportunity to complete the questionnaire was emailed to all meat processing company representatives on the environment mailing list, to capture those who had either forgotten to complete the questionnaire, or who had missed a meeting.

The target number of responses was 50. However, only 22 were collected.

**Non-attendees**

Companies from the Top 25 list who had not attended a meeting in the last two years were to be identified. It was intended that each one would be telephoned and asked a series of questions over the telephone.

However, a review of the attendance records found that all major companies had attended at least one meeting over the past three years, and so no further action was taken. A copy of this attendance review is included as Attachment 1.

**Stakeholders**

A Likert questionnaire for stakeholders was developed and mailed to each one, as follows:

|   | <b>Target</b> | <b>Rec/d</b> |
|---|---------------|--------------|
| National Environment Committee                            | 8             | 4            |
| AMIC  | 2             | 1            |
| AMPC  | 1             | 2            |
| MLA   | 2             | 1            |
| Company managers  | 11            | 8            |
| EPAs and other State Authorities                          | 5             | 3            |
| RTO   | 4             | 3            |
| Other: (Please describe)<br>Researcher/presenter<br>CSIRO | 4             | 2            |
| <b>Total</b>  | <b>37</b>     | <b>24</b>    |

**Results****Attendees**

Detailed collated results from the Attendees can be found in Attachment 2.

**1. Reasons for attending environment meetings**

Attendees were given a list of possible reasons for attending meetings and were invited to tick as many as they considered relevant, and to add further reasons if they wished. In descending order, the responses were:

|  |    |
|--|----|
| They keep me up to date on environment issues                            | 21 |
| It is a good opportunity to see and hear what other plants are doing     | 20 |
| I can learn about current research projects                              | 17 |
| I can learn about industry responses to environmental matters            | 16 |
| I like the networking opportunities                                      | 16 |
| I find out about funding available for environmental projects            | 13 |
| I can get help with environment problems                                 | 10 |
| They improve my confidence in managing environmental matters at my plant | 7  |
| It's a day away from the plant   | 3  |

One person added a further reason: Can ask about specific area/question etc

## 2. Reasons why the environment networks are important to the industry

Attendees were given a list of possible reasons why the networks might be important to the industry and were invited to select as many as they considered applicable. They were also invited to add further reasons.

In descending order, the responses were:

|   |    |
|---|----|
| They encourage networking between plants.   | 18 |
| They provide a means of getting consistency in approaches to environmental matters across the industry              | 17 |
| They are a way of finding out about MINTRAC programs and activities.  | 17 |
| They ensure that environment managers are up-to-date with industry and training requirements.                       | 16 |
| They ensure that research outcomes are disseminated and understood throughout the industry                          | 15 |
| They are a way of finding out about MLA programs and activities.  | 14 |
| They are a means of ensuring MINTRAC receives accurate industry information about environment training requirements | 11 |
| They are a good way of checking how MINTRAC spends industry money.  | 5  |
| They are not important.   | 0  |

One person added a further reason: NPI/NGERS requirements

## 3. Meeting organisation

Attendees were asked to comment on various aspects of the organisation of the meetings. The comments provided have been summarised below.

|                         |   |
|-------------------------|---|
| Pre-meeting information | All comments were positive and expressed satisfaction with the current arrangements   |
| Agendas                 | All comments were positive and expressed satisfaction with the current arrangements, although a couple requested a time limit on presentations.             |
| Minutes                 | All comments were positive and expressed satisfaction with the current arrangements   |
| Location                | All comments were positive and expressed satisfaction with the current arrangements. One Victorian response suggested that Melbourne would be more central. |
| Start time              | All comments were positive and expressed satisfaction with the current arrangements   |
| Finish time             | All comments were positive and expressed satisfaction with the current arrangements   |
| Frequency               | All comments were positive and expressed satisfaction with the current arrangements. Some suggested more frequent meetings should be held.                  |
| Chairmanship            | All comments were positive and expressed satisfaction with the current chairmanship.  |
| Food/ beverages         | All comments were positive and expressed satisfaction with the current arrangements   |

#### 4. Meeting content

Attendees were asked what they would like to see more of/increased at meetings as well as what they would like to see reduced. Most treated these two questions collectively and responses are summarised below.

##### *Would like to see more of:*

- info on nutrient/balance/budgets from wastewater application; composting; treatment of wastewater performance of differing technologies; continue visits to leaders in environmental performance in industry (e.g. Rockdale);
- a bit more meat on the agenda, more topics and maybe some external speakers e.g. Coles, Woollies etc
- training
- plant tours
- the amount of information presented in relation to projects that have been done in other plants by managers at other plants.

##### *Would like to see less of:*

- long presentations.

## 5. Reporting back to company

Attendees were asked how they reported meetings back to their company. They were given a list of possible answers and invited to tick as many as were applicable, and to add further comments if needed.

Responses in descending order were:

|   |    |
|---|----|
| I brief other staff about matters discussed at the meetings.  | 14 |
| I provide a summary to my supervisor/manager  | 13 |
| I regularly bring up information from the meetings in informal conversations with other staff at the company. | 8  |
| I regularly visit the MLA/AMIC/MINTRAC websites.  | 6  |
| I distribute the minutes.   | 3  |
| I don't: no-one at my company is really interested in what happens at the meetings.                           | 0  |

## 6. Between meeting interaction with MINTRAC/AMIC/MLA

Attendees were asked what interaction they had with the peak organisations between meetings. A range of options were offered and they were asked to tick as many as were relevant, and to add additional points if needed.

Responses, in descending order were:

|  |   |
|--|---|
| I try to attend other MINTRAC events, such as professional development, conferences etc.                             | 8 |
| I occasionally (maybe once or twice a year) ring or email with a question or problem.                                | 6 |
| I don't have any interaction between meetings.   | 6 |
| I regularly ring to talk to, or email, AMIC/MLA/MINTRAC staff about matters affecting the environment at my company. | 3 |
| I purchase MLA and MINTRAC products.   | 0 |
| Other – please list  |   |

|   |  |
|---|--|
| <ul style="list-style-type: none"> <li>• Get emails;</li> <li>• Use the websites</li> <li>• I train for MINTRAC</li> <li>• Check with site</li> </ul> |  |
|---|--|

## 7. Personal requirements

In an effort to better understand the background and requirements of the attendees, several questions were asked as follows. Responses have been summarised.

|  |  |
|--|--|
| Is responsibility for environment matters part of, or your entire job role?                      | <ul style="list-style-type: none"> <li>Over 75% of the responders had environment as part of their job responsibilities.</li> </ul>  |
| If environment is only part of your job role, what are your other areas of responsibility?       | <p>Their environmental job role was likely to be combined with:</p> <ul style="list-style-type: none"> <li>QA x 2</li> <li>HR x 1</li> <li>Maintenance x 4</li> <li>Maintenance</li> <li>Rendering x 2</li> <li>Engineering x 2</li> <li>Innovation/Projects x 4</li> <li>Boiler/refrigeration x 1</li> <li>OHS x 2</li> <li>Production Manager x 1</li> </ul>                   |
| Do you have any formal qualifications in environment matters? If yes, please list                | <p>Nearly 50% of attendees held no formal qualifications.</p> <p>Formal qualifications held by the other 50% included:</p> <ul style="list-style-type: none"> <li>Relevant B Sc degree x 8</li> <li>Masters degree x 3</li> <li>PhD x 1</li> <li>Cert IV in Env Mgt x 1</li> </ul>   |
| Do you feel you need additional training in environmental matters/issues? If yes, please explain | <p>Three responders did not feel they needed further training.</p> <p>All remaining responders did feel a need for further training, and some specified their needs, for example:</p> <ul style="list-style-type: none"> <li>water and energy management</li> <li>Govt reporting</li> <li>basic courses relating to the environment side of processing in an abattoir</li> </ul> |

## 8. Future meeting arrangements

Attendees were asked to comment on the preferred structure of future meetings. Comments have been summarised below.

- Over 80% preferred the current structure of two meetings per year.
- Opinions were equal on whether meetings should be the standard five-hour meeting including presentations and workshops, of a meeting plus a site visit.

## Stakeholders

A Likhert questionnaire was used to assess stakeholder perceptions and expectations of the Environment Networks. This method enabled stakeholders to comment on their view of the

networks, even though they may not have had direct knowledge of how they worked or the content of meetings.

Stakeholders were given a five-scale response option: strongly agree, agree, undecided, disagree, strongly disagree. Detailed collated results from the Stakeholders can be found in Attachment 3. All responders indicated that they had heard of the networks, and 86% had direct knowledge of their operations.

Nineteen questions were asked, and they fell into four main groupings, as follows.

### 1. Reasons why industry personnel attended environment meetings

Questions are ranked from those which were strongly agreed with to those which received least support.

|   | strongly agree | agree | undecided | disagree | strongly disagree |
|---|----------------|-------|-----------|----------|-------------------|
| The networks are a means of encouraging networking between plants.  | 8              | 14    | 1         |          |                   |
| The networks ensure that environment managers are up-to-date with industry environmental issues and requirements. | 8              | 10    | 2         | 1        |                   |
| The networks are a means of learning about industry responses to environmental policy matters.                    | 7              | 12    | 2         | 1        |                   |
| The networks provide a means of getting help with environment questions and problems                              | 6              | 12    | 2         | 2        |                   |
| The networks are the main way environment managers find out about MLA environment programs and activities.        | 3              | 7     | 7         | 5        |                   |
| The networks are the main way environment managers find out about industry environment programs and activities.   | 3              | 6     | 10        | 2        |                   |
| For most attendees the main attraction is a day away from work.   |                |       | 3         | 12       | 6                 |

### 2. Reasons why the environment networks are important to the industry

Questions are ranked from those which were strongly agreed with to those which received least support.



|   | strongly agree | agree | undecided | disagree | strongly disagree |
|---|----------------|-------|-----------|----------|-------------------|
| The networks are an appropriate forum for the dissemination of industry research findings and results   | 11             | 8     | 1         | 2        |                   |
| The networks provide a good opportunity to see and hear what other plants are doing to address environmental issues.                            | 6              | 14    | 1         | 1        |                   |
| The attendees at networks are the appropriate people to provide advice about industry training needs related to environment matters             | 5              | 7     | 9         | 1        |                   |
| The networks are a means of finding out about funding available for environmental projects.   | 1              | 16    | 5         |          |                   |
| The networks identify current training and professional development needs of environment managers in the industry.                              | 1              | 15    | 5         | 1        |                   |
| The network attendees can assist to ensure that MINTRAC training materials accurately reflect industry environmental practices and requirements | 3              | 12    | 5         | 1        |                   |
| The networks improve environment managers' confidence in managing environmental matters at their plant.   | 1              | 9     | 10        | 1        |                   |
| The networks have outlived their importance to the industry   | 1              |       | 3         | 11       | 6                 |
| The industry should no longer fund the Environment networks   | 1              |       | 2         | 11       | 7                 |

### 3. Reporting back to company

|   | strongly agree | agree | undecided | disagree | strongly disagree |
|---|----------------|-------|-----------|----------|-------------------|
| Network attendees are likely to disseminate information received at the meetings to other staff in their own companies. | 3              | 11    | 9         |          |                   |

### 4. Between meeting interaction with MINTRAC/AMIC/MLA and other members



|  | strongly agree | agree | undecided | disagree | strongly disagree |
|--|----------------|-------|-----------|----------|-------------------|
| Network attendees are likely to make regular contact with MINTRAC and/or MLA between meetings. | 2              | 9     | 9         | 1        |                   |
| Network attendees are likely to make direct contact with other members between meetings.       | 1              | 12    | 7         | 1        |                   |

## Discussion

### 1. Reasons for attending environment meetings

**Attendees** had multiple reasons for attending meetings, with almost universal consensus that they provided information on current environment issues, access to research outcomes, and an opportunity to see what other plants were doing. They appreciated the opportunity to network, learn about industry responses to environmental matters. Most felt that the networks assisted them to identify available funding for projects and to get help with problems.

**Stakeholders** saw networking between plants as the principal reason for attendance, but also identified access to current information on environmental issues, learning about industry responses to environmental matters and getting help with industry environmental questions and problems and issues as important reasons for attending. Generally, both groups agreed, and their responses suggest that the networks have achieved their stated goal of enhancing the skills and knowledge base of the industry's environment managers.

### 2. Value of the Environment networks to the industry

**Stakeholders** clearly viewed the networks as an appropriate forum for the dissemination of research and as an opportunity to see what other plants were doing to address environmental issues – a clear endorsement of the 2009-2010 approach of incorporating plant-based visits as part of the meeting.

Most stakeholders also valued the networks as a source of information about available funding, a means of identifying professional development needs and a means of ensuring the accuracy of training materials.

They were less certain about the attendees being the appropriate people to provide advice about industry training needs related to environment matters or about the capacity of the networks to improve environment managers' confidence in managing environmental matters at their plant. Only one responder felt that the networks had ceased to be of value to the industry.

**Attendees** almost universally felt that the networks were of value to the industry because they encouraged networking between plants, provided a means of getting consistency in approaches to environmental matters across the industry and ensured that environment managers are up-to-date with industry and training requirements. They also agreed that the networks ensured that research outcomes were disseminated and understood throughout the industry, and that they were a means of finding out about MLA and MINTRAC programs and activities.

Similar to the stakeholders, they were less certain about the capacity of the networks to provide accurate industry information about environment training requirements, or about the capacity of the networks to improve environment managers' confidence in managing environmental matters at their plant.

None of the attendees felt that the networks had outlived their usefulness.

The combined responses indicate that the networks achieve their goal of supporting the rapid uptake of technical innovations or the dissemination of new information from regulators or research agencies and supporting the timely and structured dissemination of R&D outcomes throughout the industry.

### **3. Meeting organisation**

Responses indicated a high level of satisfaction with the MINTRAC organisation and conduct of the meetings.

### **4. Meeting content**

Generally there was a high level of satisfaction with the content of the meetings.

A number of suggestions were made for future meetings and these suggestions should be considered when compiling future agendas.

### **5. Dissemination of meeting information**

Most **attendees** indicated that they briefed other company staff about matters discussed at meetings and/or provided a summary to their supervisors/manager.

Some indicated that they regularly brought up information from the meetings in informal conversations with other staff at the company and a few distributed the minutes.

Most **stakeholders** believed that attendees were likely to disseminate information received at the meetings to other staff in their own companies, but a surprisingly high percentage (38%) was undecided.

There is an opportunity for attendees to more actively disseminate network information in their plants, and means of doing this can be addressed at future meetings.

### **6. Between meeting interaction with industry organisations**

Three industry organisations – AMIC, MLA and MINTRAC – make a consistent effort to attend network meetings and make presentations about the environmental activities of their organisations. Although a funder of the networks, AMPC does not regularly attend meetings.

However, fewer than half of the attendees indicated that they undertook any regular form of between meeting interaction with these organisations. About a third of the responders indicated that they regularly visited the organisations' websites, or tried to attend MINTRAC events such as professional development or conferences. Some indicated that they occasionally (maybe once or twice a year) rang or emailed with a question or problem.

About half of the stakeholders expected that the attendees did make contact with the industry organisations between meetings.

There is an opportunity for each of the industry organisations to provide better information about their services and products, and to encourage ongoing interaction with organisational representatives.

### **7. Role of the Environment Manager in meat processing plants**

It is evident that the role of an Environment Manager in meat processing plants is a developing role. Over 75% of the responders had environment as part of their job responsibilities, and were most likely to also have responsibilities in areas such as maintenance, QA, OH&S and other projects.

Anecdotally, the fact that so many have combined roles is often cited as being a barrier to attending network meetings.

Nearly 50% of the Environment Managers had no formal qualifications. However, 50% did hold Undergraduate Degrees, and around 25% held post-graduate qualifications.

Nearly all responders indicated that they had a need for further training, though responses were generally vague about specific training requirements. MINTRAC recently consulted with industry on the potential to develop an Environmental Management Skill Set. Further consultation was recommended because the initial results produced a similar vagueness about the specific skills needs of meat industry environment managers.

The *Meat Industry Strategic Plan (2010-2015)* lists environment and ethical imperatives as its first Strategic Theme. The specific activities identified suggest that it is an industry still defining its responsibilities and responses in these areas, so it is not surprising that the industry is not yet in a position to clearly define the role, required skills and responsibilities of an environment manager.

There is an opportunity for the networks to work with the industry organisations as they implement the strategic plan and to align emerging role of the environmental managers and identify and provide the appropriate professional development.

#### **8. Future meeting arrangements**

While attendances have risen significantly in all states (except Victoria) since the introduction of the combined meeting/plant-based visit, attendee responses were clearly divided on whether this format was preferred. Over 80% preferred the current structure of two meetings per year, although attendance records (see attachment 1) indicate that very few plants have attended more than one meeting per year.

In addition, MINTRAC is under pressure from MLA and AMPC to review and reduce costs associated with running the Environment Networks. Accordingly, in the 2010- 2011 Project submission, MINTRAC has proposed a revised structure of one meeting per state per year, and a national conference. The Project also includes identifying a number of significant environmental developments within the industry and then developing short films of these to be used to aid conference presentations and for showing at state-based network meetings.

There is an opportunity for MINTRAC to continue to identify innovative ways of using technology to collect, collate and distribute environmental information.

#### **Recommendations**

It is clear that the MINTRAC Environment Network is believed to be of value to both attendees and the industry, as a forum capable of providing information on current environment issues, disseminating research outcomes, networking opportunities, and facilitating industry responses to environmental issues. They also provide a forum for addressing problems, gaining information and access to funding and accessing appropriate training.

#### **Recommendation 1: That the industry should continue to support the MINTRAC Environment Network.**

There was a high level of satisfaction demonstrated with MINTRAC's organisation and management of the meetings. However, poor attendances in some states and with pressures to reduce meeting costs, there is an opportunity for MINTRAC to continue to identify innovative ways of using technology to collect, collate and distribute environmental information.

#### **Recommendation 2: That the revised meeting structure proposed by MINTRAC for 2010-2011 be supported, and that MINTRAC continue to explore innovative ways of using**

**technology to communicate and engage with environment personnel in meat processing plants.**

There is an opportunity for attendees to more actively disseminate network information in their plants, and means of doing this can be addressed at future meetings.

**Recommendation 3: That MINTRAC actively encourage and support attendees to explore ways of disseminating environmental information at plant level.**

There is an opportunity for each of the industry organisations to provide better information about their services and products, and to encourage ongoing interaction with organisational representatives.

**Recommendation 4: That the industry organisations of MLA, AMIC, AMPC and MINTRAC explore ways of encouraging attendees to access their services between meetings.**

It is evident that the role of an Environment Manger in meat processing plants is a developing role. The *Meat Industry Strategic Plan (2010-2015)* lists environment and ethical imperatives as its first Strategic Theme. The specific activities identified suggest that it is an industry still defining its responsibilities and responses in these areas, so it is not surprising that the industry is not yet in a position to clearly define the role, required skills and responsibilities of an environment manager.

There is an opportunity for the networks to work with the industry organisations as they implement the strategic plan and to align emerging role of the environmental mangers and identify and provide the appropriate professional development.

**Recommendation 5: That the networks collaborate to align the role of the Environment Manager with industry strategic priorities and identify and implement appropriate professional development opportunities to support that role.**

## Attachment 1: Summary of attendances at Environment Network meetings

|                           | NSW    |     |        |      | QLD    |        |        |        | WA  |     |        |        | SA     |     |     |      | VIC |     |        |      | Total |     |     |      |
|---------------------------|--------|-----|--------|------|--------|--------|--------|--------|-----|-----|--------|--------|--------|-----|-----|------|-----|-----|--------|------|-------|-----|-----|------|
| Meat Companies            | 6/7    | 7/8 | 8/9    | 9/10 | 6/7    | 7/8    | 8/9    | 9/10   | 6/7 | 7/8 | 8/9    | 9/10   | 6/7    | 7/8 | 8/9 | 9/10 | 6/7 | 7/8 | 8/9    | 9/10 | 6/7   | 7/8 | 8/9 | 9/10 |
| ACC                       |        |     |        |      | 1      |        | 1      |        |     |     |        |        |        |     |     |      |     |     |        |      | 1     |     | 1   |      |
| Adelaide Poultry /Baiada  |        |     |        |      |        |        |        |        |     |     |        |        | 1<br>1 | 1   | 1   | 1    |     |     |        |      | 2     | 1   | 1   | 1    |
| Aust Food Processing Corp |        |     |        |      |        | 1<br>1 | 1<br>1 | 2<br>1 |     |     |        |        |        |     |     |      |     |     |        |      |       | 2   | 2   | 3    |
| Aust Lamb Co              |        |     |        |      |        |        |        |        |     |     |        |        |        |     |     |      | 1   | 1   | 1<br>1 |      | 1     | 1   | 2   |      |
| Big River Pork            |        |     |        |      |        |        |        |        |     |     |        |        |        |     |     | 2    |     |     |        |      |       |     |     | 2    |
| Bindaree                  |        |     | 1      |      |        |        |        | 1      |     |     |        |        |        |     |     |      |     |     |        |      |       |     |     | 1    |
| Burrangong                | 1      |     | 1      |      |        |        |        |        |     |     |        |        |        |     |     |      |     |     |        |      | 1     |     | 1   |      |
| Cargill                   | 3<br>1 |     | 2<br>4 | 1    |        |        |        |        |     |     |        |        |        |     |     |      |     |     |        |      | 4     |     | 6   | 1    |
| Castricum Bros            |        |     |        |      |        |        |        |        |     |     |        |        |        |     |     |      | 2   |     |        |      |       | 2   |     |      |
| Churchill                 |        |     | 2      | 1    | 2<br>2 |        | 2<br>1 | 2<br>2 |     |     |        |        |        |     |     |      |     |     |        |      | 4     |     | 5   | 5    |
| Conroys Smallgoods        |        |     |        |      |        |        |        |        |     |     |        |        | 1      |     |     |      |     |     |        |      |       |     |     |      |
| CRF                       |        |     |        |      |        |        |        |        |     |     |        |        |        |     |     |      | 2   |     | 1<br>1 | 1    | 2     |     | 2   | 1    |
| DBC                       |        |     |        |      |        |        |        |        | 1   | 1   | 1      | 1<br>1 |        |     |     |      |     |     |        |      | 1     | 1   | 1   | 2    |
| EC Throsby                |        |     | 1      |      |        |        |        |        |     |     |        |        |        |     |     |      |     |     |        |      |       |     | 1   |      |
| 3Fletcher                 | 2      |     | 1<br>1 |      |        |        |        |        | 1   | 1   | 1<br>2 | 2<br>1 |        |     |     |      |     |     |        |      | 3     | 1   | 5   | 3    |
| Everson's Food Processors |        |     |        | 2    |        |        |        |        |     |     |        |        |        |     |     |      |     |     |        |      |       |     |     | 2    |
| Frewstal                  |        |     |        |      |        |        |        |        |     |     |        |        |        |     |     |      | 1   | 1   |        |      | 1     | 1   |     |      |

|                         | NSW |     |     |      | QLD |     |     |      | WA  |     |     |      | SA  |     |     |      | VIC |     |     |      | Total |     |     |      |
|-------------------------|-----|-----|-----|------|-----|-----|-----|------|-----|-----|-----|------|-----|-----|-----|------|-----|-----|-----|------|-------|-----|-----|------|
| Meat Companies          | 6/7 | 7/8 | 8/9 | 9/10 | 6/7 | 7/8 | 8/9 | 9/10 | 6/7 | 7/8 | 8/9 | 9/10 | 6/7 | 7/8 | 8/9 | 9/10 | 6/7 | 7/8 | 8/9 | 9/10 | 6/7   | 7/8 | 8/9 | 9/10 |
| GBP Exports             |     |     |     |      |     |     |     |      |     |     |     |      |     |     |     |      | 1   | 1   | 1   |      | 1     | 1   | 1   | 1    |
| GM Scott                |     |     | 1   |      |     |     |     |      |     |     |     |      |     |     |     |      |     |     |     |      |       |     | 1   |      |
| Goodchilds              |     |     |     |      |     |     |     |      | 1   |     |     |      |     |     |     | 1    |     |     |     |      | 2     |     |     | 1    |
| Greenham                |     |     |     |      |     |     |     |      |     |     |     |      |     |     |     |      |     | 3   | 2   | 1    |       | 3   | 3   | 1    |
| Greenmountain Food Proc |     |     |     |      |     |     |     | 1    |     |     |     |      |     |     |     |      |     |     | 1   |      |       |     |     | 3    |
| Hans Continental        |     |     |     |      |     | 1   | 1   |      |     |     |     |      |     |     |     |      |     |     |     |      | 1     |     | 1   |      |
| Harvey Beef             |     |     |     |      |     |     |     |      | 1   | 1   | 1   | 1    |     |     |     |      |     |     |     |      | 1     | 2   | 1   | 1    |
| International Exporters |     |     |     |      |     |     |     |      |     | 1   |     |      |     |     |     |      |     |     |     |      |       | 1   |     |      |
| Kilcoy                  |     |     |     |      | 1   | 1   | 1   | 1    |     |     |     |      |     |     |     |      |     |     |     |      | 2     | 1   | 2   | 2    |
| KR Castlemaine          |     |     |     |      |     | 1   | 1   |      |     |     |     |      |     |     |     |      |     |     |     |      |       | 1   | 1   |      |
| Lobethal                |     |     |     |      |     |     |     |      |     |     |     |      | 1   | 1   |     |      |     |     |     |      | 1     | 1   |     |      |
| Midfield                |     |     |     |      |     |     |     |      |     |     |     |      |     |     |     |      | 1   |     | 1   | 1    | 1     |     | 2   | 1    |
| Monbeef                 | 1   |     | 1   | 1    |     |     |     |      |     |     |     |      |     |     |     |      |     |     |     |      | 1     |     | 1   | 1    |
| Mrs Macs                |     |     |     |      |     |     |     |      |     | 1   |     |      |     |     |     |      |     |     |     |      |       | 1   |     |      |
| Northern Co-Op          | 1   |     |     |      |     | 1   |     | 1    |     |     |     |      |     |     |     |      |     |     |     |      | 1     | 1   |     | 2    |
| Norvic                  |     |     |     |      |     |     |     |      |     |     |     |      |     |     |     |      | 2   | 1   |     |      | 2     | 2   |     |      |
| Normanville             |     |     |     |      |     |     |     |      |     |     |     |      |     |     |     |      |     |     |     |      |       | 2   |     |      |
| Oakey                   |     |     |     |      | 1   |     |     |      |     |     |     |      |     |     |     |      |     |     |     |      | 1     |     |     |      |
| Peel Valley             | 1   |     | 1   |      |     |     |     |      |     |     |     |      |     |     |     |      |     |     |     |      | 1     |     | 1   |      |

|                  | NSW    |     |     |        | QLD    |        |        |        | WA     |        |        |      | SA     |             |     |      | VIC |     |     |      | Total |     |     |      |
|------------------|--------|-----|-----|--------|--------|--------|--------|--------|--------|--------|--------|------|--------|-------------|-----|------|-----|-----|-----|------|-------|-----|-----|------|
| Meat Companies   | 6/7    | 7/8 | 8/9 | 9/10   | 6/7    | 7/8    | 8/9    | 9/10   | 6/7    | 7/8    | 8/9    | 9/10 | 6/7    | 7/8         | 8/9 | 9/10 | 6/7 | 7/8 | 8/9 | 9/10 | 6/7   | 7/8 | 8/9 | 9/10 |
| PPC              |        |     |     |        |        |        |        |        | 1<br>1 | 1<br>1 | 1<br>1 |      |        |             |     |      |     |     |     |      | 2     | 2   | 2   |      |
| Primo            |        |     | 2   |        |        |        |        |        |        |        |        |      | 2<br>2 | 2<br>2<br>2 | 2   | 1    |     |     |     |      | 4     | 6   | 2   | 1    |
| Radford & Sons   |        |     |     |        |        |        |        |        |        |        |        |      |        |             |     |      |     |     |     | 1    |       |     |     | 1    |
| Rivalea          |        |     |     |        |        |        |        |        |        |        |        |      |        |             |     | 2    |     |     |     |      |       |     |     | 2    |
| Southern Meats   | 1      |     |     |        |        |        |        |        |        |        |        |      |        |             |     |      |     |     |     |      | 1     |     |     |      |
| Stanbroke        |        |     |     |        |        |        | 1      | 1      |        |        |        |      |        |             |     |      |     |     |     |      |       |     | 1   | 1    |
| Swickers         |        |     |     |        | 1      |        |        |        |        |        |        |      |        |             |     |      |     |     |     |      | 1     |     |     |      |
| Swift            |        |     |     |        | 1      |        |        |        |        |        |        |      |        |             |     |      |     |     | 1   |      | 1     |     |     |      |
| T&R              |        |     |     |        |        |        |        |        |        |        |        |      |        | 1           | 1   | 1    |     |     |     |      |       | 1   | 1   | 1    |
| Tallowman        |        |     |     |        |        |        |        |        |        |        | 1<br>1 | 1    |        |             |     |      |     |     |     |      |       |     | 2   | 1    |
| Tasman           |        |     |     |        |        |        |        |        |        |        |        |      |        |             |     |      | 2   | 1   |     |      | 2     | 1   |     |      |
| Tatiara          |        |     |     |        |        |        |        |        |        |        |        |      | 1<br>1 | 1<br>1<br>1 | 1   |      |     |     |     |      | 2     | 3   | 1   |      |
| Teys Bros        |        |     | 1   |        | 1<br>2 | 1<br>1 | 1<br>1 | 1<br>1 |        |        |        |      | 2      | 1           |     |      |     |     |     |      | 5     | 3   | 3   | 2    |
| Thomas Borthwick |        |     |     |        | 1      | 1<br>1 | 2      | 1<br>2 |        |        |        |      |        |             |     |      |     |     |     |      | 1     | 2   | 2   | 3    |
| V&V Walsh        |        |     |     |        |        |        |        |        |        |        |        | 1    |        |             |     |      |     |     |     |      |       |     |     | 1    |
| Wagstaff         |        |     |     |        |        |        |        |        |        |        |        |      |        |             |     |      | 1   |     |     |      | 1     |     |     |      |
| West Meat Proc   |        |     |     |        |        |        |        |        | 1      | 1      |        |      |        |             |     |      |     |     |     |      | 1     | 1   |     |      |
| Wingham Beef     | 1<br>1 |     | 1   | 1<br>3 |        |        |        | 1      |        |        |        |      |        |             |     |      |     |     |     |      | 2     |     | 1   | 4    |
| Wodonga          |        |     |     |        |        |        |        |        |        |        |        |      |        |             |     |      |     | 1   | 1   |      |       | 2   | 1   |      |

|                 | NSW |     |     |      | QLD |     |     |      | WA  |     |     |      | SA  |     |     |      | VIC |     |     |      | Total |     |     |      |
|-----------------|-----|-----|-----|------|-----|-----|-----|------|-----|-----|-----|------|-----|-----|-----|------|-----|-----|-----|------|-------|-----|-----|------|
| Meat Companies  | 6/7 | 7/8 | 8/9 | 9/10 | 6/7 | 7/8 | 8/9 | 9/10 | 6/7 | 7/8 | 8/9 | 9/10 | 6/7 | 7/8 | 8/9 | 9/10 | 6/7 | 7/8 | 8/9 | 9/10 | 6/7   | 7/8 | 8/9 | 9/10 |
| Rendering       |     |     |     |      |     |     |     |      |     |     |     |      |     |     |     |      |     | 1   |     |      |       |     |     |      |
| WR Carpenter Ag |     |     |     |      |     |     |     |      |     | 1   |     |      |     |     |     |      |     |     |     |      |       | 1   |     |      |



## Attachment 2: Attendee responses

| Question   |   | ✓  | Comment  |
|--|---|----|--|
| 1. I attend Environment meetings because..... (please tick as many as apply)                     | They keep me up to date on environment issues   | 21 |  |
|  | I can get help with environment problems  | 10 |  |
|  | I can learn about industry responses to environmental matters   | 16 |  |
|  | I like the networking opportunities   | 16 |  |
|  | It's a day away from the plant  | 3  |  |
|  | They improve my confidence in managing environmental matters at my plant  | 7  |  |
|  | I find out about funding available for environmental projects   | 13 |  |
|  | It is a good opportunity to see and hear what other plants are doing  | 20 |  |
|  | I can learn about current research projects   | 17 |  |
|  | Other – please list   |    |  |
|  | <ul style="list-style-type: none"> <li>Can ask about specific area/question etc</li> </ul>                          |    |  |
| 2. Environment Networks are important to the industry because.... (please tick as many as apply) | They are not important.   |    |  |
|  | They provide a means of getting consistency in approaches to environmental matters across the industry              | 17 |  |
|  | They ensure that environment managers are up-to-date with industry and training requirements.                       | 16 | Depending on quality and timeliness of information presented |
|  | They encourage networking between plants.   | 18 |  |
|  | They are a way of finding out about MLA programs and activities.  | 14 | I use the websites   |
|  | They are a way of finding out about MINTRAC programs and activities.  | 17 | I use the websites   |
|  | They are a means of ensuring MINTRAC receives accurate industry information about environment training requirements | 11 | I use the websites   |
|  | They are a good way of checking how MINTRAC spends industry money.  | 5  |  |
|  | They ensure that research outcomes are disseminated and understood throughout the industry                          | 15 |  |
|  | Other – please list   |    |  |
|  | <ul style="list-style-type: none"> <li>NPI/NGERS requirements</li> </ul>  |    |  |

| Question  |                         | ✓  | Comment |
|---|-------------------------|--|---------|
| Question  | Comment                 |  |         |
| 3. Please comment on the organisation of the meetings | Pre-meeting information | <ul style="list-style-type: none"> <li>• Very good</li> <li>• Good x 8</li> <li>• Not very clear directions – local signage did not match location (NSW)</li> <li>• Adequate</li> <li>• First meeting I have attended – would have been good to get confirmation of attendance registration &amp; some pre-reading materials</li> <li>• OK</li> <li>• Zero</li> <li>• Great</li> <li>• Acceptable</li> <li>• Dates set well in advance – good – allows for planning of schedule around these meetings</li> </ul> |         |
|   | Agendas                 | <ul style="list-style-type: none"> <li>• Excessive on individual plants; more broad would be better;</li> <li>• Fine, but presentation on pond covers way too long (NSW)</li> <li>• Good x 10</li> <li>• Fine</li> <li>• Good, I like having an indication of time in each area</li> <li>• Good – sometimes changes are required, which is good</li> <li>• Adhered to</li> <li>• Acceptable</li> </ul>   |         |
|   | Minutes                 | <ul style="list-style-type: none"> <li>• V. Good</li> <li>• Not sure – first meeting attended</li> <li>• Good x 8</li> <li>• First time attend – have not seen any minutes</li> <li>• Adhered to</li> <li>• Acceptable</li> <li>• Could be sent out a little sooner after the meeting; content great</li> </ul>  |         |
|   | Location                | <ul style="list-style-type: none"> <li>• Good x 10</li> <li>• Excellent</li> <li>• Nice drive</li> <li>• Would like Albany, of course</li> <li>• V. Good</li> <li>• Central</li> <li>• Acceptable</li> <li>• Site locations are good, but having them away from central location such as Melbourne make it difficult to have a variety of attendees</li> </ul>   |         |
|   | Start time              | <ul style="list-style-type: none"> <li>• Good x 12</li> <li>• Fine</li> <li>• Could have been a bit earlier but can be difficult with transport</li> <li>• Prompt</li> <li>• As planned – good</li> <li>• Excellent – allows for start-up at plant</li> <li>• Acceptable</li> <li>• Have been good, allows for travel time during better</li> </ul>  |         |

| Question  |   | ✓ | Comment  |
|---|---|---|--|
|   |   |   | traffic periods, less time   |
|   | Finish time   |   | <ul style="list-style-type: none"> <li>• Good x 11</li> <li>• Fine</li> <li>• Unknown</li> <li>• As planned – good</li> <li>• Acceptable</li> <li>• Have been good, allows for travel time during better traffic periods, less time</li> </ul>   |
|   | Frequency   |   | <ul style="list-style-type: none"> <li>• Good x 6</li> <li>• OK x 5</li> <li>• Not sure – first meeting attended</li> <li>• More frequent??</li> <li>• Unknown</li> <li>• No less</li> <li>• Could be increased</li> <li>• Acceptable</li> <li>• Two meetings per year with the added inclusion of a National Conference (similar to QI/MI Network) would be a great way to discuss and learn from other states</li> </ul> |
|   | Chairmanship  |   | <ul style="list-style-type: none"> <li>• Good x 11</li> <li>• Good – but need to manage speaker times</li> <li>• V. Good x 3</li> <li>• Thorough</li> <li>• Excellent</li> <li>• In my experience the meetings are well organised and run</li> </ul>   |
|   | Food/ beverages   |   | <ul style="list-style-type: none"> <li>• V. Good x 2</li> <li>• Good x 10</li> <li>• Satisfactory</li> <li>• Excellent x 2</li> <li>• I am more concerned about the content of the meeting</li> </ul>  |
| 3. What would you like to see <i>added/increased</i> at Environment network meetings? | <ul style="list-style-type: none"> <li>• Further info on nutrient/balance/budgets from wastewater application; composting; treatment of wastewater performance of differing technologies; continue visits to leaders in environmental performance in industry (e.g. Rockdale);</li> <li>• Please provide name tags; Please also show where the amenities in club are; thank you for the opportunity to comment</li> <li>• Format was right</li> <li>• It would be good to have a bit more meat on the agenda, more topics and maybe some external speakers e.g. Coles, Woollies etc</li> <li>• Training, as spoken about, with OSCAR 2 coming up</li> <li>• Attendees have name badges and companies they work for</li> <li>• First meeting attended</li> <li>• Plant tours more useful</li> <li>• Increase the amount of information presented in relation to projects that have been done in other plants by managers at other plants.</li> </ul> |   |  |
| 4. What would you like to see <i>less of</i> in the meetings?                         | <ul style="list-style-type: none"> <li>• Shorten presentations on each specific topic;</li> <li>• Fine at present</li> <li>• First meeting I've attended and everything seems important</li> </ul>  |   |  |

| Question  |   | ✓   | Comment  |
|---|---|---|--|
|   |   |   |  |
| Question  |   | ✓   | Comment  |
| 5. How do you report back to your company after the Environment meetings?<br>(please tick as many as apply) | I don't: no-one at my company is really interested in what happens at the meetings.   |   |  |
|   | I provide a summary to my supervisor/manager  | 13  | Verbally to MD<br>Will do  |
|   | I brief other staff about matters discussed at the meetings.  | 14  | Pass on info if required<br>I will   |
|   | I distribute the minutes.   | 3   | Will do<br>Yes, I will   |
|   | I regularly bring up information from the meetings in informal conversations with other staff at the company.   | 8   | Financial controllers unaware of CPRS implications on bottom line<br>At pre-production meeting |
|   | I regularly visit the MLA/AMIC/MINTRAC websites.  | 6   | Yes  |
|   | Other – please list <ul style="list-style-type: none"> <li>I am this company</li> <li>First time attended</li> </ul>  | 1   |  |
| 6. What interaction do you have with MINTRAC between meetings?<br>(please tick as many as apply)            | I regularly ring to talk to, or email, AMIC/MLA/MINTRAC staff about matters affecting the environment at my company.  | 3   | Not as such, but look forward to doing these issues  |
|   | I occasionally (maybe once or twice a year) ring or email with a question or problem.   | 6   | I Have   |
|   | I purchase MLA and MINTRAC products.  |   | Not as yet, but I intend to  |
|   | I try to attend other MINTRAC events, such as professional development, conferences etc.  | 8   | Yes  |
|   | I don't have any interaction between meetings.  | 6   |  |
|   | Other – please list <ul style="list-style-type: none"> <li>Get emails;</li> <li>Use the websites</li> <li>I train for MINTRAC</li> <li>Check with site</li> </ul> |   |  |
| 8. About you  | Is responsibility for environment matters part of, or your entire job role?   | <ul style="list-style-type: none"> <li>Part: 15</li> <li>ALL: 4</li> </ul>                |  |
|   | If environment is only part of your job role, what are your other areas of  | <ul style="list-style-type: none"> <li>QA x 2</li> <li>HR</li> <li>Maintenance</li> </ul> |  |

| Question              |  | ✓   | Comment |
|-----------------------|--|---|---------|
|                       | responsibility?  | <ul style="list-style-type: none"> <li>• Maintenance &amp; Rendering Mgr</li> <li>• Engineering Manager</li> <li>• Innovation/Projects</li> <li>• Plant Engineer/Rendering Mgr</li> <li>• Boiler/refrigeration</li> <li>• OHS/Supervision</li> <li>• Projects/Maintenance/Dangerous Goods</li> <li>• Projects</li> <li>• Production Manager</li> <li>• Maintenance Mgr</li> <li>• Mgt of projects related to environment</li> </ul>   |         |
|                       | Do you have any formal qualifications in environment matters? If yes, please list  | <ul style="list-style-type: none"> <li>• Degree</li> <li>• BSc (Environmental Biology)</li> <li>• BSc (Env. Sc)</li> <li>• BSc</li> <li>• BSc, M Env Mgt</li> <li>• No x 9</li> <li>• Degree in Biotechnology</li> <li>• Cert IV in Env Mgt</li> <li>• Masters in Env Bus Mgt</li> <li>• PhD funded by MINTRAC</li> <li>• BSc (Catchments Mgt); B Env Sc; MEnv</li> </ul>   |         |
|                       | Do you feel you need additional training in environmental matters/issues? If yes, please explain   | <ul style="list-style-type: none"> <li>• Yes – water and energy management</li> <li>• Yes – Govt reporting training</li> <li>• Yes x 2</li> <li>• Yes = formal</li> <li>• You can always use additional education</li> <li>• No x 2</li> <li>• Not at this time – attending on behalf of Enviro Mngr</li> <li>• Always training and learning is good</li> <li>• Yes – any basic courses relating to the environment side of processing in an abattoir</li> <li>• All training adding to knowledge base is useful</li> </ul> |         |
| 9. Future meetings    | Which of the following is your preference:<br>(a) Continue with two meetings per year<br>(b) Reduce to one meeting per year plus a national conference,<br>(c) Other (please describe) | <p>17 (1 said plus conf)</p> <p>1</p> <p>Unsure</p> <p>3 per year x 2</p>   |         |
| 10. Meeting structure | Which of the following is your preference:<br>(a) Standard 5-hour meeting including  | 11  |         |

| Question |   | ✓   | Comment |
|----------|---|---|---------|
|          | <p>presentations and workshops</p> <p>(b) Shortened meeting followed by a site visit</p> <p>(c) Other (please describe)</p> | <p>10</p> <ul style="list-style-type: none"> <li>• Broaden site visits – more topics</li> <li>• On line – teleconference – skype or satellite – webcam</li> <li>• Unsure</li> <li>• I think the shorter meetings with site visits have been very beneficial, however, I think longer meetings should be kept as well, to make sure we are up to date with as much industry information as available. Possibly 1 long and 1 short meeting per year?</li> </ul> |         |

## Attachment 3: Stakeholder responses

### Starter questions

|  | Yes | No |
|--|-----|----|
| Have you ever heard of the MINTRAC Environment Networks?             | 22  |    |
| Do you have any direct knowledge about their purpose and operations? | 19  | 2  |

### Select respondent category (tick)

|   | Target | Rec/d |
|---|--------|-------|
| National Environment Committee                            | 8      | 4     |
| AMIC  | 2      | 1     |
| AMPC  | 1      | 2     |
| MLA   | 2      | 1     |
| Company managers  | 11     | 8     |
| EPAs and other State Authorities                          | 5      | 3     |
| RTO   | 4      | 3     |
| Other: (Please describe)<br>Researcher/presenter<br>CSIRO | 4      | 2     |

|    |   | 5              | 4     | 3         | 2        | 1                 |
|----|---|----------------|-------|-----------|----------|-------------------|
|    |   | strongly agree | agree | undecided | disagree | strongly disagree |
| 1. | The networks ensure that environment managers are up-to-date with industry environmental issues and requirements. | 8              | 10    | 2         | 1        |                   |
| 2. | The networks provide a means of getting help with environment questions and problems                              | 6              | 12    | 2         | 2        |                   |
| 3. | The networks are a means of learning about industry responses to environmental policy matters.                    | 7              | 12    | 2         | 1        |                   |
| 4. | The networks are a means of encouraging networking between plants.  | 8              | 14    | 1         |          |                   |
| 5. | The networks are the main way environment managers find out about MLA environment programs and activities.        | 3              | 7     | 7         | 5        |                   |
| 6. | The networks are the main way environment managers find out about industry environment programs and activities.   | 3              | 6     | 10        | 2        |                   |



|     |   | 5              | 4     | 3         | 2        | 1                 |
|-----|---|----------------|-------|-----------|----------|-------------------|
|     |   | strongly agree | agree | undecided | disagree | strongly disagree |
| 7.  | The networks identify current training and professional development needs of environment managers in the industry.                              | 1              | 15    | 5         | 1        |                   |
| 8.  | The networks improve environment managers' confidence in managing environmental matters at their plant.   | 1              | 9     | 10        | 1        |                   |
| 9.  | The networks are a means of finding out about funding available for environmental projects.   | 1              | 16    | 5         |          |                   |
| 10. | The networks provide a good opportunity to see and hear what other plants are doing to address environmental issues.                            | 6              | 14    | 1         | 1        |                   |
| 11. | The networks are an appropriate forum for the dissemination of industry research findings and results   | 11             | 8     | 1         | 2        |                   |
| 12. | The attendees at networks are the appropriate people to provide advice about industry training needs related to environment matters             | 5              | 7     | 9         | 1        |                   |
| 13. | For most attendees the main attraction is a day away from work.   |                |       | 3         | 12       | 6                 |
| 14. | Network attendees are likely to disseminate information received at the meetings to other staff in their own companies.                         | 3              | 11    | 9         |          |                   |
| 15. | Network attendees are likely to make direct contact with other members between meetings.  | 1              | 12    | 7         | 1        |                   |
| 16. | Network attendees are likely to make regular contact with MINTRAC and/or MLA between meetings.  | 2              | 9     | 9         | 1        |                   |
| 17. | The network attendees can assist to ensure that MINTRAC training materials accurately reflect industry environmental practices and requirements | 3              | 12    | 5         | 1        |                   |
| 18. | The networks have outlived their importance to the industry   | 1              |       | 3         | 11       | 6                 |
| 19. | The industry should no longer fund the Environment networks   | 1              |       | 2         | 11       | 7                 |