



MEAT INDUSTRY ENVIRONMENT NETWORK

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1.0 EXECUTIVE SUMMARY

The Meat Industry Environment Network provides a means to share information on the research, development and extension (RD&E) activities relating to AMPC's Environment and Sustainability RD&E program. It promotes engagement with environment manager from processing establishments, researchers, regulators and industry consultants to ensure that all parties are meeting new regulatory requirements and that new information is disseminated.

The network also provided a means of showcasing new technologies and initiatives being undertaken by meat processing plants and other industries such as energy efficiency, water harvesting and reuse, solid waste management, greenhouse gas emissions management.

Three showcase clips were filmed for this project – Thomas Foods International waste water system, Teys' Hide Processing water reuse and recycling and the Advanced Water Management Centre (AWMC) at the University of Queensland.

The Thomas Foods International, Murry Bridge and Teys' Hide Processing, Murgon films have been submitted to and approved by AMPC. The University of Queensland AWMC third film is in the final editing stage and will be submitted to AMPC for approval as soon as it is completed.

This project also included three state-based network meetings. In 2016-17, Environment Network meetings were scheduled for Tamworth, Brisbane and Melbourne. The agenda for all the meetings included an overview of MINTRAC activities, the showing of films from the environmental innovation series, an overview of AMPC's environmental portfolio and projects and updates on AMPC funded projects.

2.0 INTRODUCTION

The Meat Industry Environment Network provides a means to share information on the research, development and extension (RD&E) activities relating to AMPC's Environment and Sustainability RD&E program. It promotes engagement with environment manager from processing establishments, researchers, regulators and industry consultants to ensure that all parties are meeting new regulatory requirements and that new information is disseminated.

The network also provided a means of showcasing new technologies and initiatives being undertaken by meat processing plants and other industries such as energy efficiency, water harvesting and reuse, solid waste management, greenhouse gas emissions management.

Funding for this project includes three state-based network meetings. Accompanying these meetings (where possible) will be site visits which will be filmed. The filmed site visits will be produced into showcase clips including interviews with site managers and engineers for loading onto the AMPC website.

The project aims to create a network where processors can share information and ideas about current and ongoing research and development in environment and sustainability. It also provides a means to transfer knowledge from AMPC's environment project and R&D outcomes to the meat processing industry. This has been achieved in part through a series of informative showcase films

which promote the positive way the industry has been addressing environmental issues. These films have been shown at network meeting where they have been well received and generate discussion among the attendees.

The Environment Network meetings act as a communication channel between industry, regulators, researchers and consultants. It helps ensure the dissemination of R&D outcomes to the industry and has provide a means for attendees to gain information on the progress of current AMPC research projects.

3.0 PROJECT OBJECTIVES

The project objectives are to:

- create a network which facilitates processor inputs and sharing of information and ideas in response to current and ongoing research and development in the areas of environment and sustainability
- facilitate the transfer of knowledge form AMPC's environment project outcomes to the meat processing industry
- act as a communication channel between industry, regulators, researchers and consultants to ensure industry is managing its environmental responsibilities
- ensure the timely and structured dissemination of R&D outcome throughout the industry
- develop a dynamic and informative series of showcase clips to promote the positive approach industry has in addressing its environmental responsibilities.

4.0 METHODOLOGY

In 2016-17 MINTRAC's management of this program included:

- organizing one network meeting in three states, as agreed with AMPC
- organizing site visits to accompany each network meeting (where possible)
- filming up to three onsite projects and organising interviews and material for the showcase clips
- preparing the showcase clips to be uploaded onto the AMPC website
- developing communication channel between the various parties involved including processors, researchers, regulators and industry consultants
- providing information about current and completed AMPC projects at each meeting (as provided by AMPC
- ensuring new requirements and practices are incorporated into the nationally accredited qualifications
- advising on training materials that need modification due to changes in regulations, research outcomes, new technologies etc

- collecting and analyzing data to determine the success of the networks in meeting their objectives.

5.0 PROJECT OUTCOMES

5.1 Showcase clips submitted to AMPC for approval

Three showcase clips were filmed for this project:

1. The waste water system at Thomas Foods International's Murray Bridge facility – a low energy, highly efficient system which recovers valuable resources from the waste water while meeting all the relevant legislative and licensing requirements and improving the environmental outcomes for the local community.
2. The water reuse and recycle at Teys Hide Processing Plant in Murgon – the plant now recycles every wastewater stream and reuses it wherever they can, uses sludge to make compost and has reduced the waste leaving the plant to just one skip bin a week.
3. The lab at the University of Queensland's Advanced Water Management Center (AWMC) where they are undertaking research for AMPC on effective and low cost management of water resources and using waste water streams for feedstock and value added products.

The Thomas Foods International, Murry Bridge and Teys' Hide Processing, Murgon films have been submitted to and approved by AMPC. The University of Queensland AWMC third film is in the final editing stage and will be submitted to AMPC for approval as soon as it is completed.

5.2 Final summary of scheduled v actual Environment Network meetings

Three Environment Network meetings were scheduled for this project – Tamworth, Brisbane and Melbourne. The agenda for all the meetings included an overview of MINTRAC activities, the showing of films from the environmental innovation series and an overview of AMPC's environmental portfolio and projects.

The meeting in Tamworth was held on Friday 18 November and ten people attended this meeting. Other agenda items included:

- Overview and report on the AMPC energy productivity capacity building program by Roger Horwood, Energetics Pty Ltd
- Presentation on 'Ten ways to improve your energy consumption' by Michael Bellstedt, Minus 40 Ltd

The Brisbane meeting was held on 22 March and 21 people attended. Additional agenda items included:

- Investigating steam heat recovery systems and their applicability to the red meat industry, and modular micro-turbine cogenerators and organic rankine cycle congeneration systems for abattoirs by Gareth Forde, All Energy Pty Ltd
- Energy and water benchmarking and opportunities analysis tool, and the capacity building program for energy productivity by Simon
- Water recycling and run-off project by Penny Prasad, Eco Efficiency Group by Simon Bunstad and Phil Shorten, Energetic Pty Ltd

The Melbourne meeting was held on 24 May and eight people attended. As well as the presentations repeated from the previous meetings, the agenda included a presentation on 'Funding assistance options for RMI capital projects' by Max Barnes, All Energy Ltd.

The minutes from these meetings were provided to AMPC in the Milestone reports..

5.3 Summary of stakeholder consultation and involvement in networks, including feedback by participants

Although numbers of attendees at Tamworth and Melbourne were lower than expected, attendees did say they got value from attending the meetings, especially as it gave them a chance to meet and interact with people from other plants. It also gave them an insight into the research projects that were being undertaken by AMPC as well as a chance to provide feedback on some of them.

5.4 Summary of issues raised, initiatives and outcomes of the Environment Network for the year

During the meetings, attendees were asked about the environmental issues that were affecting their plants. Disposing of paunch and meeting EPA/compliance requirements were common issues for all meeting attendees, other issues raised included:

- composting
- water conservation
- phosphorus removal
- biogas
- drains technology
- care and maintenance of anaerobic lagoons
- waste water – new technologies
- BOD limits

Where possible these issues will provide the basis for agenda items for future network meetings. Although not raised as an issue by attendees, it would be beneficial to include more site visits as part of the network meetings. However, it is very difficult to find plants that will agree to host a site visit and are also within acceptable travel distances for attendees.

5.5 Recommendations for coming year

Based on feedback from attendees, the agenda and venue (including site visits where possible) should be prepared and distributed well in advance to enable them to plan for time off their plant. Agenda items should also be based on topics that reflect the day to day environmental issues facing processors and provide practical solutions/examples if possible.

Due to the interest shown by attendees, the showcase films should be continued although, as it is difficult to find completed projects for filming, it is recommended that only two films are produced for the 2017-18 year.

6.0 CONCLUSIONS/RECOMMENDATIONS

For the 2017-18 year it, the agenda and venue should be prepared and distributed well in advance to enable invitees to plan for time off their plant. Agenda items would also be based on topics that reflect the day to day environmental issues facing processors and provide practical solutions/examples if possible.

It is also recommended that two more showcase films would be developed for the 2017-18 as the current films have been well received by attendees at this year's Environment Network meeting. Where possible it would also be beneficial to incorporate site visits as part of the meetings.

7.0 APPENDICES

7.1 Appendix 1 - Snapshot

This is provided as a separate attachment.