

Terms of Reference

Waste utilisation handbook for feedlots

Summary:

Meat & Livestock Australia (MLA) is seeking expressions of interest from individuals, organisations or project teams that can collect, collate, distil and summarise the disparate information available on the handling and utilisation of feedlot manure and effluent, to produce a waste utilisation handbook in a form suitable for use by both industry consultants and operators.

Background:

Manure, effluent and mortalities are the major waste products from the feedlot system. They contain valuable nutrients that can replace inorganic fertilisers in farming systems and home gardens. However, they also contain contaminants and other nutrients that can cause harm if not treated and utilised appropriately.

Over the past 15 years, MLA and other research providers have funded a range of projects on the safe and effective handling and utilisation of manure and effluent. This research work has assessed:

- quantity and characteristics of manure and effluent at the various stages of the production cycle;
- potential for weed seed viability and transfer in manure;
- potential microbiological and chemical contaminants of manure and effluent, incorporating a human health risk assessment and practical ways to reduce this risk;
- appropriate composting techniques for manure and mortalities;
- effects of manure and effluent on soils and crop production; and
- management practices for sustainable and profitable utilisation of manure and effluent in cropping systems.

In addition, there is considerable information available in the public arena. Industry sees value in pulling all this information together to produce a reference document that addresses all aspects of manure and effluent handling and utilisation and highlights the critical issues for their safe, sustainable and productive utilisation.

Project objectives:

1. Collect and collate the available information on manure and effluent handling and utilisation for the full cycle from production to use.
2. Distil the key management practices that should be implemented to ensure safe, sustainable and productive handling and utilisation of these products.
3. Prepare a print-ready handbook that conveys the key information to allow feedlot operators to implement and monitor safe, sustainable and productive handling and utilisation of these products.

Methodology:

Without limiting the ability of the applicant to develop and apply any particular approach or methodology, it is envisaged that the project will involve a desktop exercise to pull together a significant amount of disparate information, followed by some interpretation and distillation of the gathered information and data to tailor solutions that will meet the requirements of the feedlot sector.

Process:

The Expression of Interest should be submitted using an MLA Project Application supplemented with appendices as required, to address any specific requirements. To access the project application template, go to www.mla.com.au and follow the links to *Research and development*, then *Funding opportunities* and *Industry and researchers* and then look for the section on that page headed *Research organisation funding* to download the **MLA Full application template and guidelines**.

In particular, the proposal should:

1. Detail the approach that will be adopted to address the project objectives.
2. Detail the specific work activities proposed and timelines for their achievement.
3. Provide details of the information/data to be collected, collated and assessed and how these activities will be undertaken.
4. Include a detailed and fully costed budget that covers all the resources required to undertake the work, including details of basis for charging (daily fees, number of days, expenses, etc.).
5. Propose a payment schedule, taking account of the following:
 - o Progress payments may be negotiated against project milestones if the size and timescale of the project warrant this. The proposal should propose milestones and payments if required.
 - o A minimum of 20% of the project budget must be retained for payment against the final milestone.
 - o Payment of fees will be upon MLA acceptance of the attainment of the milestones.

Selection criteria:

Selection of the successful proposal will be based on the following criteria:

1. Soundness of the method proposed to complete the project objectives, including timelines and milestones by which progress will be measured;
2. Demonstration of the applicants knowledge and understanding of the relevant issues;
3. Track record of the applicant and proposed team members; and
4. The project budget and assessed value for money.

Reporting requirements:

The successful applicant will provide milestone reports (if required) and a final report giving full details of the results of the work. Milestone and final reports will be prepared in line with MLA report guidelines. Templates are available at the same location as the application templates on the MLA website.

The successful applicant may also be required to prepare and/or contribute to short articles for dissemination in MLA and industry publications.

The researcher shall report directly to Des Rinehart, MLA Feedlot R&D Project Manager.

Confidentiality and IP:

Where information is available which may assist the successful applicant in meeting the requirements of the project, MLA will provide such information to the successful applicant. All

data and cited references must be acknowledged appropriately in the final publication and it is the sole responsibility of the applicant to ensure copyright laws are not breached.

The successful applicant will be required to enter into a standard agreement with MLA.

Further information:

If you have questions regarding this project, contact:

Des Rinehart
Feedlot R&D Project Manager
Livestock Production Innovation
Meat & Livestock Australia

Phone: 0417 728785

Email: drinehart@mla.com.au

Project proposal submissions:

Proposals must be lodged electronically as Word document to: applications@mla.com.au

Proposals must be received by **COB Friday 10 February 2012.**