

# Australian Pork Limited

AUSTRALIAN  
Pork™

REQUEST FOR PROPOSAL

UNDERSTANDING AND SOLVING THE USE OF VETERINARY PLASTIC CONSUMABLES IN  
PORK PRODUCTION

December 2022



# Request for Proposals

**Project objective – to understand the true scale of veterinary consumables plastic waste generated through practices like livestock artificial insemination and identify a path to eliminating this waste stream**

## **Australian Pork Limited**

Australian Pork Limited (APL) is the national representative body for Australian pig producers. APL is a producer-owned not-for-profit company combining marketing, export development, research, innovation and strategic policy development to assist in securing a profitable and sustainable future for the Australian pork industry. It is one of 15 rural research and development corporations (RDCs) providing research to Australian agriculture.

Funded by pig farmers, APL is paid to do what farmers can't do for themselves. This includes:

- a. Building demand for pork meat products
- b. R&D to reduce costs, improve product quality and value chain efficiency
- c. Interaction with government on farmers' behalf

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## **Background**

As part of our 2020-2025 Strategic Plan, APL has committed to driving towards zero waste to landfill. To further this goal we undertook a waste roadmap to identify actions that industry can take now and future research needs. While organic waste has a good array of solutions, hard waste continues to be a challenge for agriculture. While in theory, plastics like the catheters used in artificial insemination can be bunched, baled and recycled with certain providers, this is practically challenging.

Artificial insemination (AI) is a backbone of many industries, particularly to those who incorporate breeding on site rather than relying on buying in stock. This is true for both the pork and dairy industries in Australia. In the pork industry, there are approximately 275,000 sows in the national herd. These sows are mated on average twice per year in a double insemination process. This means that 4-5 straws are used per sow per year adding up to 1.375 million straws for this alone, excluding the soft plastic packaging, semen bottles, storage eskies, catheters and other consumable supplies for this process. For pork, most of these supplies come from only a couple of companies. This is just one example of a husbandry practice that can generate large amounts of plastic waste in a piggery through the use of single-use consumables.

A lot of this plastic is simply discarded on farm, buried or taken to landfill. With most states introducing legislation to ban single use plastics in consumer goods such as plastic bags and straws, while this is yet to apply to agriculture it would be prudent to be proactive and future proof processes. As the process of AI is fairly contained it offers a good opportunity to use as a circular case study in a broader consideration of veterinary plastic consumables used on Australian pig farms.

## **Current project**

APL is seeking proposals to undertake an assessment of piggery veterinary plastic consumables to quantify the amount of rigid and soft plastic waste that it generates as non-reusable and non-recyclable plastic waste wrapping, catheters, semen dose tubes etc. This study should consider an average (medium sized) indoor and outdoor piggery at a minimum with data extrapolations to cover different piggery sizes. Inclusion of more case studies would be considered an advantage.

The project then needs to consider options for eliminating this waste, from substitution to process redesign or any other advancements or opportunities for collection and manufacturing recycling facilities that may be relevant to this field. Options should be thoroughly analysed to consider – cost of implementation, environmental impacts (including product supply chain), ease of implementation,

any special considerations eg additional equipment required. Consideration should be given to working with existing suppliers to improve the circularity of their products.

Preference will be given to proposals that present meaningful extension outputs which could include (but is not limited to):

- peer reviewed journal articles,
- glovebox guides,
- factsheets,
- infographics.

At a minimum the successful applicant will be requested to present the results in a webinar for industry.

## **Research Purpose**

**Project objective – to quantify the amount of veterinary plastic waste generated by the Australian pork industry and propose solutions**

## **Key research objectives**

Objectives and Outputs

1. Case study of a minimum of 1 medium indoor and 1 medium outdoor piggery
2. Data extrapolation to other piggery sizes and industry as a whole
3. Provision of viable options and alternatives to reduce waste
4. Webinar recording

## **Methodology**

The consultant is to recommend the best methodology to achieve desired outcomes.

## **Evaluation criteria**

- Scientific quality and research relevance
  - Scientific foundation of the project proposal and quality of the research plan.
- Project proposal feasibility
  - Realism and feasibility of the research (with respect to the planned time, objectives, intended results, risks, proposed costs and resources available).
- Applicant and research environment quality
  - Scientific competence and research contributions of the applicant, research institute and/or team members in the proposed area (based on previous accomplishments and international relationships).
  - Proven ability to generate adoptable strategies for industries on ambitious targets
  - Applicant familiarity with intensive animal industry husbandry practices
- Adoption and additional analysis options
  - Options/Development of extension material on project outcomes considered an advantage.

## **Timeline**

<b>Date</b>	<b>Activity</b>
5 <sup>th</sup> December 2022	Applications open
10 <sup>th</sup> January 2023	Applications close 5pm
31 <sup>st</sup> January 2023	Notification of proposal review outcome



3 <sup>rd</sup> February 2023	Issue of Provider Agreement for successful applications and commencement of project
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**\*Note** Applications with long timeframes should include a minimum of 1 progress report every six months. Longer timeframes for this project may be considered, please contact to discuss.

**Budget considerations:** Budget for this financial year 22/23 is limited, please call to discuss.

### **Submissions**

Before submitting, applicants are strongly advised to refer to the guidelines for research application on the APL website at <https://australianpork.com.au/funding-and-resources>

How to make a submission:

Register or log in via PigConnect - <https://pigconnect.australianpork.com.au/>

- Submit and manage Project Applications
- View and manage your in-progress Projects
- Review Project Applications referred to you

**Submissions close 5pm Friday 2<sup>nd</sup> December 2022**

### **Contact**

If you are interested in submitting an application, please contact

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