

# *C. bovis* Risk Management Support

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## 1.0 Executive Summary

Dr Stevens has attended all Steering Group meetings for *C. bovis* to date and provided advice on the production of recycled water and exposure to cattle. Additional scientific advice has been documented for SafeMeat with reference to *C. bovis* management changes and presented to SafeMeat.

Expert and scientific support has also been provided to the associated risk management framework project regarding the treatment, use, validation and verification of recycled water quality exposed to the cattle.

The final documentation and improvements to the appropriate standards and fact sheets have been made and the project completed successfully. Consequently, the Steering Group was dissolved on the 15/3/2023.

## 2.0 Introduction

This project is part of a larger project that addresses the translation of changes to post-mortem inspection techniques arising from a risk-based review of AS4696:2007. In the pending AS4696:2022 (the standard) routine inspection for *Cysticercus bovis* (CB) allows for taking grazing-history into consideration whereby minimum inspection is conducted; comprised of routine incision of the heart but not masseters. Current inspection will be reserved for cattle with a National Livestock Identification System (NLIS) CB status. The risk management framework (the framework) is also intended to consider provisions for cattle that have grazed land where recycled water used for irrigating pastures achieves adequate helminth egg reduction (*Taenia saginata*).

The objectives of the entire project include:

1. Development of the Risk Management Framework (the framework) for *C. bovis*
2. Engagement with key stakeholders to build a national system (AHC, ISC, CCA, Waste-Water sector)
3. Activities to address technical and regulatory gaps – potential “audit” of helminth egg (*T. saginata*) mitigation of Waste-Water Treatment Plants where recycled water is/may be used for pasture irrigation
4. Support development of Equivalence Proposal to sensitive markets
5. Support development of supply chain verification pilots.

## 3.0 Project Objectives

This project objectives were to:

- Provision of scientific and expert advice to the *C. bovis* Steering Group via scheduled meetings and provision of comment and information as required. Advice would be related primarily to recycled water production from sewage and exposure of the recycled water to cattle across Australia, and the relevant guidelines and risk management strategy to achieve this.
- The provision of scientific and expert advice to Dr Andrew Pointon’s associated risk framework project, as per the advice above.

## 4.0 Methodology

The methodology for this project is to:

- Attend all *C. bovis* Steering Group meetings;
- Provide support materials for meetings, as required; and
- Provide scientific advice for *C. bovis* risk from recycled water use, as required by the Steering Group and other components for Andrew Pointon's project.

## 5.0 Project Outcomes

The project has progressed well and all milestones have been achieved. As agreed, the work and support required for the project have changed somewhat as the Steering Group has progressed, requiring drafting, commenting, proofing of documentation and standards (AS 4696, LPA, NLIS, SafeMeat, Risk Management) for various relevant bodies between meetings. Various discussions with Andrew Pointon and the Working Group have also helped develop and clarify the recycled water components of these documents. The final documentation and improvements for standards have been made and consequently the Steering Group was dissolved on the 15/3/2023.

The final documents where expert advice were supplied are as follows and will eventually be uploaded to the website Integrity Systems Company<sup>1</sup>. The documents were:

1. DRAFT LPA Standards v23\_24 February 2023.pdf
2. Risk Management of *C. bovis* in LPA and NLIS\_v1 2023.pdf
3. New NLIS Statuses for *C. bovis*\_24 February 2023.pdf
4. Flow chart for managing *C. bovis* Cattle with lost tags v2\_2023.pdf

The property risk assessment factsheet, template, learning module and any info that is publicly available on the Integrity System Company's (ESC) website will be updated to include these *C. bovis* additions. The risk management fact sheet and flow chart will also be made public.

## 6.0 Discussion

The project was to provide support to the *C. bovis* Steering Group and Andy Pointon's project. This objective has been achieved.

## 7.0 Conclusions / Recommendations

The water industry sectors produces most of the recycled water which pose a *C. bovis* risk (*T. saginata* eggs can be found in faeces of the infect intermediate host (humans), which lead to *C. bovis* in cattle if the eggs are ingested). Consequently, the water industry sector should be communicated with as to how the meat industry intend to handle the risk of *C. bovis* for their domestic and international markets in the future.

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<sup>1</sup> <https://www.integritysystems.com.au/on-farm-assurance/property-risk-assessments/>

## 8.0 Bibliography

No references have been made.