



Final report

Biosecurity manual for pre-export quarantine premises

Project code W.LIV.0192

Prepared by Maria Thompson

Scott Williams
Russell Pattinson

Date published July 2020

Published by LiveCorp Meat & Livestock Australia Limited

PO Box 1174

NORTH SYDNEY NSW 2059 NORTH SYDNEY NSW 2059

Locked Bag 991

In partnership with

AgSTAR Projects



LiveCorp and Meat & Livestock Australia acknowledge the contribution from the Commonwealth of Australia to research and development undertaken in the LEP RD&E Program.

This document is published by the Livestock Export Program (LEP), a collaboration between the Australian Livestock Export Corporation (LiveCorp) and Meat & Livestock Australia (MLA). Care is taken to ensure the accuracy of the information contained in this document. However, LiveCorp and MLA cannot accept responsibility for the accuracy or completeness of the information or opinions contained in the document. No person should act on the basis of the contents of this publication without first obtaining specific, independent professional advice. Any recommendations, suggestions or opinions contained in this publication do not necessarily represent the policy or views of LiveCorp and MLA. Reproduction in whole or in part of this publication is prohibited without prior written consent from LiveCorp.

Contents

Acrony	yms	3
About	this Manual	5
Section	n A: What is biosecurity?	6
	nique aspects of biosecurity and pre-export premises	
	elevant legislation	
	porting country requirements	
	emises risk assessment	
Section	n B: Recommended practices	8
1. M	anagement of inputs	8
1.1	Livestock	8
1.2	Water	11
1.2	Feed	11
1.3	Bedding	11
2. M	anagement of people, vehicles and equipment	12
2.1	Employees and family	12
2.2	Visitors, contractors, suppliers and other service personnel	12
2.3	Equipment	12
2.4	Vehicles	13
3. M	anagement of animals and animal products	13
3.1	Monitoring livestock	13
3.2	Manure and effluent management	13
3.3	Dead stock management	14
4. Pr	emises Management	14
4.1	Maintenance and fencing	14
4.2	Dust management	15
4.3	Management between consignments	15
5. M	anagement of feral animals, pests and vermin	16
5.1	Pests and vermin	16
5.2	Feral animals and wildlife	16
6 M	anagement of outgoing product	16
6.1	Movement of livestock off the premises	16
6.2	Disposal of waste feed and spoiled bedding	16
7. Ac	dministrative procedures	17
7.1	Staff training	17
7.2	Document control & record management	17
Biose	ecurity Planning Signposts:	17
Section	n C: Premise design	18
1. Re	ecommended biosecurity areas	19
Α.	Non-animal areas	19
В.	Animal / animal product areas	
2. Ve	ehicle washdown facility guideline	21
Section	n D: Staff	22

References	24
Appendix I. Template biosecurity plan	25
Appendix II: Emergency animal disease planning	34
Emergency Animal Disease (EAD) Action Plan	34

Acronyms

ACVO	Australian Chief Veterinary Officer
АНА	Animal Health Australia
AHD	Animal Health Declaration
AP	Approved Premises
ASEL	Australian Standards for the Export of Livestock (Version 2.3) 2011
AUSVETPLAN	Australian Veterinary Emergency Plan
BSE	Bovine spongiform encephalopathy
CSEP	Consignment Specific Export Plan
DAWR	Department of Agriculture and Water Resources
EAD	Emergency Animal Disease
EADRA	Emergency Animal Disease Response Agreement
ESCAS	Exporter Supply Chain Assurance Scheme
ESI	Export Slaughter Interval
FMD	Foot & Mouth Disease
HGP	Hormonal Growth Promotant
IPA	Invasive Pests and Animals
LBN	Livestock Biosecurity Network
LiveCorp	Australian Livestock Export Corporation
LPA	Livestock Production Assurance
MICoR	Manual of Importing Country Requirements
MLA	Meat & Livestock Australia
NFAS	National Feedlot Accreditation System
NLIS	National Livestock Identification System
Nol	Notices of Intention
NVD	National Vendor Declaration
OiE	World Organisation for Animal Health
PIC	Property Identification Code
PPE	Personal Protective Equipment
RAM	Restricted Animal Material
RP	Registered Premise
RFB	Ruminant Feed Ban
SEP	Standard Export Plans
WHP	Withholding Period

WHS	Work Health and Safety
-----	------------------------

About this Manual

This manual has been developed as a tool for pre-export premises to assist with the implementation of key biosecurity principles as standard operating procedures and work instructions. The manual aims to cover key biosecurity practices that should be followed wherever possible and practicable.

This document aims to be applicable for all pre-export premises across Australia; however specific requirements may vary considerably according to:

- The type of premises
- Whether the facility is in northern or southern Australia
- The state or territory where the premises is located
- The species and class of livestock
- Class and maximum number of animals to be held at the premises
- The types of operations to be carried out
- The importing country requirements.

The key elements in this manual have been collated from various industry biosecurity manuals and resources (see the reference list).

This document also uses '*Signposts*' to direct you to additional references, links and further information.

Appendix I provides a Template Biosecurity Plan and Appendix II includes an EAD Action Plan.

Links with other Industry Systems

Pre-export premises should already have many of these biosecurity elements in place as part of industry integrity programs including the National Livestock Identification System (NLIS)¹, the Livestock Production Assurance (LPA)² program and, where applicable, the National Feedlot Accreditation System (NFAS)³. Awareness of and links to these other industry systems is critically important.

¹ NLIS is the red meat industry's system for identifying and tracking sheep and cattle for food safety, disease control and market access purposes.

² The LPA program is the Australian livestock industry's on-farm assurance program covering food safety, animal welfare and biosecurity. It provides evidence of livestock history and on-farm practices when transferring livestock through the value chain.

³ The NFAS is the beef feedlot industry's self-regulated quality assurance program that underpins its commitment to animal welfare, environment, meat quality and food safety.

Section A: What is biosecurity?

Biosecurity is recognised as one of the most important aspects of good livestock production. Biosecurity includes all the physical and procedural measures taken by any facility to minimise the risks of:

- Introducing and exposing humans to zoonotic disease.
- Introducing animals with an endemic disease or an emergency animal disease (EAD).
- Spreading disease from the facility to nearby livestock production.
- Introducing and spreading weeds and plant pests.

Demonstrating to our overseas trading partners that biosecurity is an important and practised part of animal production in Australia provides an important source of competitive advantage.

1. Unique aspects of biosecurity and pre-export premises

A pre-export premises presents a high biosecurity risk because:

- Animals are introduced from many different properties over a short period of time.
- Animals are transported, introduced to a new environment and given a new diet. They may experience some stress and thus increased susceptibility to infection.
- There will be many transport vehicles and feed delivery vehicles coming and going.
- Disease can spread very easily and rapidly between the animals.
- Many animals becoming sick at once produces a large amount of infectious agent that can infect others, including neighbouring livestock or future consignments.

On the other hand, a pre-export premises also have some biosecurity advantages including:

- In some instances, all animals will leave the facility at about the same time, and then the facility will be empty. This time allows for a full clean and decontamination.
- There may be an opportunity to have animal-free time of weeks between shipments (time for infectious agents to reduce in number).
- There is very good surveillance with at least daily feeding and checking.
- The size of the facility can justify the personnel required to better manage biosecurity.
- The business structure provides more opportunities to provide staff with biosecurity training.

2. Relevant legislation

For the state and territory legislation applicable to biosecurity and animal health, refer to the *Reference Manual for Pre-Export Quarantine Premises* (available from LiveCorp), which accompanies this manual.

The most significant legislation applies to the compulsory notification of diagnosis or suspicion of an EAD. This ensures that the appropriate authoritative body is notified of such a disease to allow for its immediate investigation and, if necessary, implementation of an emergency response.

3. Importing country requirements

In addition to the animal health and welfare concerns they pose, there are a range of exotic (not present in Australia) and endemic (present in Australia) diseases that require specific attention due to importing country requirements.

These requirements are listed on the MICoR website (see https://micor.agriculture.gov.au/live-animals/Pages/default.aspx) and are updated regularly. The livestock exporter will advise premises operators of requirements depending on the country of destination but they may include:

- Specific fencing requirements to keep animals separated.
- A specified length of time for animals to be in quarantine premises prior to export by sea or air.
- Demonstration through negative tests that animals are free from various diseases;
- Administration of treatments against internal and external parasites.
- Confirmation by the Australian Chief Veterinary Officer (ACVO) that Australia is free from diseases including foot & mouth disease (FMD) and carries negligible bovine spongiform encephalopathy (BSE) risk.
- Certification that no cases of diseases such as anthrax or bluetongue have occurred in the property of origin of the animals in the previous 6 months.
- Absence of signs of transmissible disease (such as enzootic bovine leucosis (EBL), anthrax, Johne's disease, Hendra) during the 60 days prior to export.
- Absence of scabby mouth lesions, ringworm and warts.
- Freedom from agalactia, echinococcosis, melioidosis and notifiable diseases of the premises where animals have resided for the previous 12 months.
- No administration to animals of medicines not registered in Australia.
- No administration to animals of hormonal growth promotants (HGPs).
- No feeding of animal protein other than milk to animals.
- No animals exported while they are within veterinary chemical withholding periods.

Additional protocols are required for some exporting countries such as:

- Registered premises (RPs) being free of livestock for a certain number of days, and hard surfaces cleaned and disinfected before receiving animals.
- Common unloading, treatment and loading areas must be cleaned and hard surfaces disinfected between consignments.
- A disinfection pool or mat to be installed at the entrance of the loading ramp to disinfect hooves when entering the RP.
- Dust control.

4. Premises risk assessment

A risk assessment should be conducted for each premises to identify the risks in each step of the operation and to implement control measures appropriate to these risks.

It is important to consider the following, which will impact on the implementation of the biosecurity arrangements:

- The size of the operation
- The location and layout of the property and facilities
- Sources of water and feed supply
- The species that the facility will handle
- The disease status of the district
- Proximity to other livestock facilities and type of wildlife
- Customer/supplier arrangements
- Exporter requirements

• Any other operational management practices.

Section B: Recommended practices

The following recommended practices are designed to assist pre-export premises to embed key biosecurity principles in the premises' standard operating procedures and work instructions. A biosecurity template can be found in Appendix I.

1. Management of inputs

It is essential that, prior to the introduction of any livestock, water, feed, bedding or other product, a biosecurity risk assessment is completed and considered.

1.1 Livestock

Pre-export premises have many significant biosecurity challenges principally because they aggregate large numbers of livestock from different properties, transported over considerable distances to a central point. The livestock also need to adapt to a change in diet, location and social grouping.

In order to reduce the risk, processes and procedures need to be put into place along the chain, including:

- 1.1.1 Where practicable, having the exporter/agent select the most appropriate animals from the primary property including considering:
 - Animal health and welfare status;
 - Vaccination status;
 - Body condition;
 - o Breed and age; and
 - Time of the year (current weather condition in Australia and at the importing country).
- 1.1.2 All livestock are individually inspected at unloading to determine whether they are suitable for preparation for export (ASEL S3.13b)
- 1.1.3 Any livestock identified at unloading as being distressed, injured or otherwise unsuitable for export must be marked by a permanent method and isolated from the rest of the consignment. A record must be kept that details identity, the method of treatment or euthanasia and disposal of all rejected animals (ASEL 3.17).
 - **Signpost** Criteria for rejection are outlined in <u>ASEL Appendix 3.1</u> (ASEL S3.17). Livestock with any of these criteria should be removed from the consignment before they enter the Premises.

Signpost - Is it fit to export?

Management of unfit-to-load livestock

- 1.1.4 Maintaining a record of inspection.
 - Signpost Farm Biosecurity stock receival & inspection form
- 1.1.5 Ensuring that the vendor provides a fully completed National Vendor Declaration (NVD) and, where possible, an Animal Health Declaration for the consigned livestock.
 - **Signpost** <u>National Vendor Declaration</u> & <u>Animal Health Declarations</u>
- 1.1.6 Ensuring all livestock are National Livestock Identification System (NLIS) identified and that they are transferred to the pre-export premises' property identification code (PIC) within 48 hours.
 - **Signpost -** Livestock Export NLIS SOPs
- 1.1.7 Adhering to the NLIS legislation of the state/territory of the premises at all times.
- 1.1.8 All livestock are unloaded as soon as possible after arrival at the RP.

1.1.9 Where possible, minimising the mixing of newly arrived livestock.

1.2 Water

- 1.2.1 The use of suitable water supply is important for good biosecurity.
- 1.2.2 Drinking water for livestock should meet appropriate standards.
 Signpost For cattle these are recommended in the <u>National Guidelines for Beef Cattle</u>
 Feedlots in Australia, 3rd Edition. For sheep, there are a number of references in relation to water quality including via the <u>NSW DPI</u>
- 1.1.1 Ensure water troughs are positioned apart from hay and feed sources to prevent fouling and are kept clean (ASEL 3.7(g)).
- 1.1.2 Seek expert advice on water treatment options if water testing shows the available water to be of unsuitable quality.
- 1.1.3 If water treatment is used, the method should be regularly monitored for effectiveness.

1.2 Feed

- 1.2.1 The premises should identify reputable and reliable suppliers of feed. It is advisable that enquiries are made as to the biosecurity measures that are taken in the preparation of the product and the avoidance of contamination in the period following processing and during delivery.
- 1.2.2 The suppliers may have a quality assurance program that includes biosecurity measures and in addition the premises should request a 'Commodity Vendor Declaration'. This provides information about the source of the feed, the use of chemicals and product integrity.
- 1.2.3 There are also other specific country requirements that need to be checked within MICoR or instruction provided by the exporter.
 - Signpost MICoR
- 1.2.4 Ensure that the ban on feeding of animal products to ruminant livestock (Ruminant Feed Ban) is complied with. Restricted animal material (RAM) or any material that may contain or may have been in contact with RAM must not be fed to ruminants. There are specific regulations in each state prohibiting the feeding of RAM.
 - Signpost For more information visit Animal Health Australia Ruminant Feed Ban
- 1.2.5 Store feed in a manner that minimises contamination by livestock, vermin, insects, wildlife, feral and domestic animals, and other feed types.
- 1.2.6 Feed spills should be cleaned up as soon as practicable. Spilled and spoiling feed attracts pests and vermin to the premises.
- 1.2.7 Feeding troughs should be kept clean, free from faecal and urinary contamination and from moisture or dirt. Old accumulated feed should be removed before new feed is supplied. Care not to spill feed will help to stop grazing from the dirt.
 Signpost The Feedlot industry has published a useful summary of feed and water trough cleaning in the <u>Beef cattle feedlots: waste management and utilisation</u> (see Appendix 1).

1.3 Bedding

- 1.3.1 Where bedding is used, ensure bedding material is fit for purpose.
- 1.3.2 The bedding needs to be available in a sustainable supply and must be free from contamination from chemicals, abrasive material and faecal and urinary contamination from rodents and other animals.
- 1.3.3 Areas where bedding is stored should be kept as dry and vermin-free as is practically possible.

2. Management of people, vehicles and equipment

2.1 Employees and family

- 2.1.1 Personnel should wear laundered clean clothes each day at the commencement of their work.
- 2.1.2 Boots that are worn at the premises should not be taken outside the premises unless cleaned, as they are the most likely method of diseases being spread by personnel. Boots should be cleaned between consignments.
- 2.1.3 Protective clothing and footwear should be worn in the premises hospital pens/isolation area and removed prior to exiting.
- 2.1.4 Hands should also be sanitised on leaving the hospital pens.

2.2 Visitors, contractors, suppliers and other service personnel

- 2.2.1 The potential for the introduction and transmission of an emergency animal disease by visitors should be recognised.
- 2.2.2 Assess all visitors (including contractors) entering the premises for their biosecurity risk prior to their being granted access to the premises complex and surrounds. The risk assessment should consider the potential for visitors to have been previously exposed to a disease and the consequent potential for them to introduce a disease onto the premises.
 - Signpost Farm Biosecurity visitor & staff risk assessment
- 2.2.3 Ensure that all visitors entering the premises are directed to a designated meeting place away from the main livestock area, preferably the office, before access is allowed to the main livestock area.
- 2.2.4 Maintain a register of visitors and vehicles (including contractors) to the premises which includes a record of:
 - Date;
 - Time in;
 - Name(s);
 - Company;
 - Contact number;
 - Motor vehicle registration;
 - Signature;
 - Biosecurity risk assessment (see below); and
 - Time out.

Signpost – Farm Biosecurity <u>visitor register</u> template

2.3 Equipment

- 2.3.1 The potential for introduction and transmission of an emergency disease by borrowed/hired equipment should be recognised.
- 2.3.2 Wherever possible, do not use the same equipment for handling feed and manure. If equipment must be used for multiple purposes, then wash and disinfect it between uses to ensure that manure does not contaminate feed commodities.
- 2.3.3 For any machinery, tools or equipment that have left the property and are being returned, a biosecurity risk assessment should be completed. If there is a high biosecurity risk for any item the decision to allow entry should be made by the manager

of the premises. All items should be cleaned and decontaminated.

Signpost – Farm Biosecurity: <u>People, vehicles and equipment and Vehicle contamination</u> & cleaning record

2.4 Vehicles

- 2.4.1 The potential for introduction and transmission of an emergency disease by visiting vehicles and machinery should be recognised.
- 2.4.2 The entry of non-premises-owned vehicles, machinery and equipment into areas of the premises beyond the specified delivery areas should be limited.
- 2.4.3 There must be a designated parking area for vehicles not entering the animal area.
- 2.4.4 All visitors should park their vehicles outside the animal area unless it is essential that the vehicle be taken on site; for example, some maintenance contractors. All vehicles, machinery and equipment entering the animal area should be directed to specified locations and delivery areas within the premises.
- 2.4.5 If any vehicle is taken into the animal area(s), it needs to be assessed as to its risk and washed and disinfected prior to entry and exit as required.
 - **Signpost** Farm Biosecurity: <u>People, vehicles and equipment</u>

3. Management of animals and animal products

3.1 Monitoring livestock

- 3.1.1 All stock must be inspected daily by a competent stock person (ASEL S3.16a).
- 3.1.2 Daily monitoring of livestock in the premises for signs of illness/injury and maintenance of records as part of a health management program should be undertaken.
- 3.1.3 All sick or injured livestock must be given immediate treatment, and veterinary advice must be sought if the cause of a sickness or injury is not obvious, or if action taken to prevent or treat the problem is ineffective (ASEL S3.16b).
- 3.1.4 Investigation by a registered veterinarian must be conducted if mortalities in any one paddock or shed exceed 0.1% or 3 deaths, whichever is the greater, on any one day for cattle and buffalo, or 0.25% or 3 deaths, whichever is the greater, on any one day for any other species of livestock (ASEL S3.16c).
- 3.1.5 In the Operations Manual, records for daily health inspections must include:
 - o Record of mortalities, location and identification;
 - Record of hospitalised animals and treatments;
 - Submission of daily records to Department of Agriculture and Water Resources regional office; and
 - Details of post-mortems including the name of the registered veterinarian(s) and the post-mortem results.
- 3.1.6 Records of each consignment must be kept for at least 2 years after the date of export (ASEL S3.16d).
- 3.1.7 An EAD Plan should be developed and ready for implementation at any time (see Appendix II).

3.2 Manure and effluent management

- 3.2.1 The potential for manure and effluent to pose a potential biosecurity risk should be recognised.
 - **Signpost** The Feedlot industry has published a useful summary of manure management in its waste management document <u>Beef cattle feedlots: waste management and utilisation</u> (see page 2 Pen cleaning and Appendix 6, page 3.).
- 3.2.2 Movements of manure and/or compost removed from the site should be recorded.

- 3.2.3 Dates, areas of manure and effluent application and application rates should be recorded in accordance with the requirements of the <u>National Beef Cattle Feedlot</u> Environmental Code of Practice.
- 3.2.4 For some emergency disease outbreaks there may be a requirement under AUSVETPLAN for the mass decontamination and disposal of manure and effluent. The premises should consider, as part of an EAD response plan, how this could be managed.

 Signpost AUSVET PLAN Manuals & Documents

3.3 Dead stock management

- 3.3.1 Dead stock should be disposed of in accordance with documented procedures that take into account environmental and public considerations.
 Signpost For cattle, aim to satisfy the <u>National Beef Cattle Feedlot Environmental Code of Practice</u>. For sheep <u>National Procedures and Guidelines for Intensive Sheep and Lamb Feeding Systems</u>, section 4.11.
- 3.3.2 Dead livestock must be collected and disposed of on a daily basis. Animals must not be able to access the area for disposal of carcases (ASEL S3.16c).
- 3.3.3 In the Operations Manual, records for disposal of carcases must include:
 - Recording of animal identification;
 - o Date of disposal; and
 - Notification to exporter.
- 3.3.4 A premise should have a specific access area for a knackery truck to collect deceased animals or a biosecure and EPA-approved disposal arrangement for on-property burial.
- 3.3.5 If the latter, dead stock placed in a pit should be covered as soon as possible to eliminate potential problems with feral animal activity.
- 3.3.6 A management plan for the mass disposal of dead stock should be developed.
 Signpost The <u>AUSVETPLAN Disposal and Feedlot Enterprise Manuals</u> provide relevant information in this regard.
- 3.3.7 The premises will need to have the machinery required to remove livestock that die away from the pens.

4. Premises Management

4.1 Maintenance and fencing

- 4.1.1 Where applicable, grass on and around the pens should be kept cut. Long grass attracts rodents and favours the survival of viruses, bacteria and parasites (i.e. ticks).
- 4.1.2 As much as possible, maintenance should be conducted between consignments. Ensure that all hardware is removed in the clean-up.
- 4.1.3 Fencing at the premises must be inspected before the entry of each consignment and twice a week while livestock are in the registered premises (ASEL 3.6 c).
- 4.1.4 Internal fences must be adequately maintained to prevent any mixing of livestock within the premises.
- 4.1.5 Perimeter fences must be adequately maintained to prevent any contact of livestock in the premises to stock in adjoining areas.
- 4.1.6 There should be a minimum livestock traffic separation of 2 metres maintained at all times, or livestock are separated by a physical barrier such as a fenced road or lane or a fully fenced empty paddock, unless specified otherwise by the importing country (ASEL S3.3 b(ii))

4.2 Dust management

- 4.2.1 In all aspects of management at the premises, measures should be taken to minimise the formation of a dust particle aerosol. Any dust created within the premises may contain infectious material that could spread to neighbouring properties.
- 4.2.2 As it is not practical to remove dust from the air, management efforts should be directed towards minimising dust creation. The different approaches are:

 In yards / pens:
 - remove excess manure
 - set up a sprinkler system

Roads and service areas

- water application
- removal of manure

Signpost - <u>Dust control -</u> See the Dust Management chapter 3, page 4 of *Beef cattle feedlots: Waste management and utilisation* document

4.3 Management between consignments

One of the most challenging elements of operating a Registered Premise is the management of more than one consignment in the premise at any one time.

- 4.3.1 Where a period of pre-export quarantine or isolation is required by the importing country, animals forming the consignment must at all times be physically isolated from all other animals (whether for an alternative export market or domestic use) to prevent contact (ASEL).
- 4.3.2 Where handling facilities used for loading, holding, treating or inspecting livestock (including roadway and lanes) are to be used for both domestic and export livestock (including livestock of differing export status), the operator of the premises must have procedures in place to ensure that:
 - (i) handling facilities are not used simultaneously by livestock of differing pre-export quarantine or isolation status;
 - (ii) a minimum livestock traffic separation of 2 m is maintained at all times, or livestock are separated by a physical barrier such as a fenced road or lane or a fully fenced empty paddock, unless specified otherwise by the importing country; and (iii) handling facilities and equipment used by different consignments of animals are
 - managed in accordance with the pre-export quarantine or isolation requirements of each importing country (ASEL)
- 4.3.3 It is vitally important to check the importing country requirements with the exporter as different destinations have different requirements.

Signpost: MICoR

- 4.3.4 Movement of all animals and all animal health treatments must be recorded so that appropriate biosecurity processes can be demonstrated and validated.
- 4.3.5 In some instances, if all animals leave the facility at about the same time, and the facility will be empty then this time allows for a full clean and decontamination of the premises.
 - **Signposts** National Biosecurity Manual for Beef Cattle Feedlots
- 4.3.6 If there are specific endemic disease incursions in the premises, consult your veterinary advisor in relation to stand-down times (e.g. periods of time where the yards or

paddocks are rested). For example, in the case of salmonella a research report⁴ noted that 'In the face of an outbreak, sheep in affected paddock(s) should only be moved if this can be done with minimal stress, if suitable empty paddocks are located nearby, and if sheep from non-affected paddocks are not put at-risk. The sheep should be given high-quality feed and water. Antimicrobial agents should not be used therapeutically (to treat clinically-affected animals). After the affected consignment has been removed, ground maintenance should be undertaken to limit survival of the organism, and the paddock should be spelled for at least one month'.

5. Management of feral animals, pests and vermin

5.1 Pests and vermin

- 5.1.1 A pest and vermin control program should be implemented that ensures that the pest population is kept to a minimum while ensuring that livestock are not exposed to the baits such as rodenticide, either directly or through contamination of feed or water.
- 5.1.2 Additional rodent control measures should include:
 - Avoiding spills of feed, and
 - Cleaning up spills and waste feed quickly.

5.2 Feral animals and wildlife

- 5.2.1 The potential for introduction and transmission of an emergency disease by feral animals and wildlife should be recognised.
- 5.2.2 The potential for feral animals and/or wildlife to access water and feed sources should be minimised through control mechanisms.
- 5.2.3 It is not unusual to have a number of resident feral or domestic cats that may assist in keeping the rodent population under control. The movement of cats can also facilitate the mechanical spread of disease.

6 Management of outgoing product

6.1 Movement of livestock off the premises

- 6.1.1 Livestock must be inspected prior to loading and any animal showing signs consistent with the rejection criteria in ASEL, or any other condition that could cause the animal's health and welfare to decline during transport or export preparation, must not be transported.
- 6.1.2 Only livestock fit to travel, which meet importing country requirements, can be loaded for transport to the port of embarkation.

The ASEL (s3.8 and s3.9) also provide a range of requirements in relation to the preparation of animals depending on class, geographical region and time of the year. **Signpost** – <u>Is it fit to Export Guide</u>

Management of unfit-to-load livestock

6.2 Disposal of waste feed and spoiled bedding

6.2.1 Waste feed and bedding should be disposed of in a way that does not allow any infectious agent present on the materials to spread to other susceptible livestock either by direct contact, aerosol or through mechanical vectors such as machinery, rodents and other animals.

⁴ More (2002). Live.112. Salmonellosis control and best-practice in live sheep export feedlots – final report

- Note: As well as consideration of contamination within the premises and property and to the neighbours, there are strict guidelines and legislation within each state and territory, which is managed by an Environment Protection Authority (EPA). This includes consideration or the environment and pollution in terms of noise and smell.
- 6.2.2 Movement of waste through the premises should be managed systematically to avoid disease spread (see 3.2 for manure management). Any waste that is removed from the premises /property should be recorded. This would allow for tracing should that be required.

7. Administrative procedures

7.1 Staff training

- 7.1.1 All employees involved in the daily monitoring and handling of stock should be familiar with the premises' animal health management plans and understand the importance of early detection of diseases and know what to do if they suspect an animal may be exhibiting symptoms of disease.
- 7.1.2 All employees involved in the usage and application of farm disinfectants and herbicides must be competent to do so. Refer to agricultural and veterinary chemical training.

 Signpost Farm Biosecurity Training record

7.2 Document control & record management

- 7.2.1 A sketch or map of the layout of the property, showing the production area, sheds, paddocks, access roads and gates should be created and maintained up to date.
- 7.2.2 Records and documentation in line with previous sections of this manual, the premises Operations Manual and other recording requirements for ASEL must be maintained.

Biosecurity Planning Signposts:

Signposts

➤ Farm Biosecurity App

The Farm Biosecurity app is based on six biosecurity essentials covering every aspect of day-to-day activities. To make your biosecurity plan, simply select the actions that apply to you from the suggestions, or type in your own actions. Your selections become a to-do list that you can share with others. You can attach photos as reminders or to let others know what needs to be done.

Guide to developing an on-farm biosecurity Plan for your grazing enterprise

This guide provides a broad range of general guidelines to assist you in developing a practical biosecurity plan for addressing disease, pest and weed prevention and control on your farm.

➤ National Biosecurity Manual for Beef Cattle Feedlots

This biosecurity manual outlines elements of best management practices to protect feedlot operations against the likelihood of disease entering into and spreading through their cattle population and being passed to other livestock operations, and to minimise the incidence and spread of microorganisms of public health significance.

> A Guide to Developing an Animal Health Management Plan

Section C: Premise design

The design of a registered premise for exporting livestock requires a number of considerations including but not limited to location, infrastructure, design, environmental factors, approvals, distance to port and many more.

This section will focus on important biosecurity principles. There is a range of already developed tools in industry, which are highlighted below under 'signposts'.

Additional considerations of the site of the premises and design will help to mitigate some of the biosecurity risks associated with a pre-export premise. The premise should preferably:

- Have well-defined animal and non-animal areas.
- Have a good quality all-weather access road for vehicles.
- Be located centrally within a parcel of land, providing a buffer to surrounding livestock and residential areas and allowing for double fenced boundary fences if required.
- Not be located within proximity to any other intensive livestock production systems.
- Not be immediately adjacent to a feed processing facility, wool handling facility or abattoir.
- Have a single-entry point from the main road.
- Have good shelter belts to help:
 - Reduce environmental weather impacts
 - Provide a visual barrier
 - o Reduce dust aerosols
- Have yards that allow for safe (non-slip) and low-stress livestock movements.
- Have well-maintained animal handling facilities to reduce the chance of injury to animals.
- Have a car park for staff and visitors that is not immediately adjacent to animal pens.
- Have a washdown/decontamination facility for vehicles.
- Have clean water supply (free from faecal and urine contamination and free from access to wild and feral animals).
- Have clean and well-maintained feed storage facilities (free from moisture).
- Have feed and water troughs that can be easily cleaned.
- Have a surface in the pens that can be cleaned easily but also is not slippery or rough on animals' feet (limiting falls and foot damage).
- Have fencing that is appropriate to hold livestock and to prevent the entry of livestock, is well-maintained and regularly inspected (as required in ASEL) and meets importing country requirements.
- Have suitable restraining facilities so animals can be examined and treated as needed.

Signposts

There are two very useful references in relation to designs for cattle feedlot and intensive lamb finishing.

➤ Beef Cattle Feedlots: Design and construction (Watts P.J.et al 2016)

This 530-page electronic manual provides extensive information on stages of selecting a suitable site, designing the feedlot and its facilities, their construction and the overall management of the project.

> National procedures and quidelines for intensive sheep and lamb feeding systems

This 125-page document covers a range of considerations relevant to sheep including premises design, feeding systems and animal health.

There is also a range of other industry documents available to assist with premises design for biosecurity for example:

Salmonellosis control and best-practice in live sheep export feedlots – final report (More 2002)

1. Recommended biosecurity areas

To reduce biosecurity risk, and as noted above, it is recommended that a premise be divided physically and functionally into two main areas: the 'animal area' that contains animal and animal products etc., and the 'non-animal' area such as the office. Biosecurity measures can then be planned according to the biosecurity risk of the area. It is advisable when setting up a premise that the two areas are considered to be distinctly different. If this is not possible all areas of the premises need to be considered 'animal areas'.

These two areas should be clearly identified with signs and staff trained on the required procedures of moving between them. There should be strict movement restriction of all persons, animals, tools, machine, feed etc. between the two areas. As a general principle, personnel should not move between the non-animal and animal areas without some level of biosecurity management. This minimises the risk of diseases being spread **to** the animals within the premises (for example, from staff who are in contact with livestock outside the premises); or **from** the animals within the premises to the outside world, should there be undetected disease present.

At a minimum, personnel moving between the two areas should disinfect their hands and boots. Separate clothing or a removable external layer of clothing should also be worn on the animal side. For example, overalls may be provided to be worn in the animal area and removed before movement into the non-animal area.

A. Non-animal areas

This would include office, reception, parking and similar parts of the premises.

B. Animal / animal product areas

This is the majority of the area in the premises. It can be further divided into the following four areas that carry more specific biosecurity risks:

- i. Transit area (where animals arrive and leave)
- ii. **Clean area/activity** (relatively clean work, such as feed preparation)
- iii. **Dirty area/activity** (animals, manure, dirty bedding, fatalities)
- iv. Isolation area

i. Transit area

This is the area where the transport trucks load and unload stock. This area is ideally separated from the main part of the premises where the animals are penned, so that in the event of the arrival of stock that are diseased or with a health status that is not verifiable, these stock can either be refused permission to unload or quickly reloaded and the area decontaminated after the transport vehicles have gone and before new consignments arrive. It is preferable that deliveries of non-animal products like food, bedding, drenches and other animal treatments are received at a different area, to reduce the risk of contamination with stock unloading and loading.

ii. Clean versus iii. dirty area

Staff, tools and machines may be assigned as performing 'clean tasks' while others are considered 'dirty tasks' as above. Transferring between these tasks would only occur with sufficient decontamination in between. This is discussed further below.

Staff may be allocated jobs in the clean area first thing in the morning and then dirty jobs in the afternoon. This is based on the assumption that after work they will go home, shower and have clean clothes the next day for work. This may be just as effective in managing the biosecurity risk as assigning tasks in designated areas.

If staff and visitors can be trained to engage with the concept of clean vs dirty, and animal vs non-animal areas, it will be much easier to have an effective system of biosecure measures.

Provisions for staff showers would also allow staff that have become grossly contaminated with waste or other products during the working day to shower on the premises and apply new clean clothes or premises-supplied clean overalls.

It is recommended that there be a high-pressure wash-down area to make it easier to clean and decontaminate vehicles and tools. If machines or tools have been exposed to infectious material then washing them with a high-pressure hose may create an aerosol of infectious material. The use of suitable disinfectants in the washing and decontamination process can help to manage this risk. Tall impervious walls around the wash-down areas also help to contain the spray and help to reduce potential spread by aerosol. These measures would be particularly important in the case of an emergency animal disease outbreak.

Consideration must also be given as to where the wastewater will end up. During an emergency response the amount of wastewater generated from cleaning and decontamination may be significant. In some situations, the infective agent survives in the wastewater. This may mean the wastewater would need to be treated to make it safe from a disease perspective, but environmental considerations would also be important. AUSVETPLAN manuals provide comprehensive details on the appropriate disinfectant to use for various diseases and which surfaces should be decontaminated. This information would be available from the local state or territory government.

In the case of an endemic disease outbreak, it is sensible to disinfect and wash down all hard surfaces that may have been contaminated with the pathogen. Consult your veterinary advisor for specific instructions depending on the disease in question.

iv. Isolation area

Any animal that is identified as being unwell should be placed in an isolation or hospital pen (see ASEL 3.16). This pen should be suitably separated from the animal holding pens and feed preparation areas. Ideally, it would be surrounded by an impervious wall to help contain the spread of infection by aerosol.

Isolation allows the animal to be treated while containing the infection spread. Unwell animals need more regular checking, and this is more manageable when the animal is isolated. The welfare of the animal can be negatively impacted by being placed in a pen alone. This can be reduced by giving it another couple of pen mates. These animals are likely to become infected with any disease that is present, so choose animals that have already been in close proximity to the sick animal. This will also reduce any stress associated with a new social grouping.

The isolation area should:

- Be located on the same property
- Comprise several small pens
- Be surrounded by solid material walls
- Be removed from the animal pens
- Be removed from the feed preparation area
- Be removed from staff facilities (offices, tea rooms etc.)
- Be attended by allocated staff member(s)
- Be thoroughly cleaned and disinfected (hard surfaces) and waste feed, manure etc. removed at appropriate times
- Have specific clothing allocated for use within it, including personal protective equipment (PPE) depending on the likely disease (on advice from the premises veterinarian)
- Have all details of attending staff, clinical signs, veterinary visits, medicines given and general health (eating, drinking etc.) carefully recorded.

2. Vehicle washdown facility guideline

Vehicle tyres, undercarriages, grills, floors and trays can carry pests, weeds and disease agents in soil, plant material, animal material and manure. When setting up and running a high-pressure vehicle washdown facility:

- Establish the facility well away from livestock and crops;
- Have a sump to collect any wastewater;
- Consider the inclusion of an air compressor or vacuum to help remove dry seeds, dirt and plant matter in some instances;
- Ensure any run off is directed away from livestock pens, paddocks, crops and waterways;
- Regularly check areas around the washdown facility for new pests or weeds;
- Keep an up-to-date equipment and vehicle cleaning record;
- Clean machinery from the top down and dismantle it as far as possible to gain access to internal spaces;
- Clean and disinfect all borrowed or second hand machinery before using it on the premises;
 and
- Follow any washdown with a broad-spectrum disinfectant. This will further reduce the risk of introducing less visible threats like bacteria, viruses, and spores onto the premises.

Section D: Staff

All staff form part of the biosecurity risk (and play a critical role in solutions). This includes the direct risk to themselves of contracting a zoonotic infection, or the risk of taking a zoonotic disease home to their families (on clothing, shoes etc). Staff may also inadvertently carry infectious agents on their person, clothing or shoes and this might result in:

- Introduction of a disease to the livestock at the premises;
- Spread of disease between livestock within the premises; or
- Facilitating disease spread away from the premises to other susceptible livestock.

The degree of biosecurity risk created by staff depends on many factors. Although some of these factors cannot be changed, the risk can often be significantly reduced with appropriate training. These biosecurity risk factors include:

- Susceptibility to zoonotic infection increased in people who:
 - Are very young or very old
 - Are pregnant
 - Are immunocompromised
 - Have a concurrent illness
 - Are inadequately vaccinated
- Exposure to sources of infection or animals susceptible to infection:
 - Animals at home
 - o Part-time job elsewhere involving animals, animal products or animal feed
 - o Overseas travel including contact with livestock.
- At-work:
 - o Basic hygiene (hand and boot washing)
 - Paying attention to clean and non-clean areas/jobs, hospital pens and other pens and between consignments.

All staff should go through an individual biosecurity risk assessment and this should be periodically reviewed. Management can then make informed decisions about delegating jobs/roles to staff. Management may consider measures such as those listed here to achieve the best outcomes for the staff livestock and their business:

- Allocating duties consistent with the risk profile
- Providing personal protective equipment (PPE)
- Supplying overclothes and boots
- Installing hand washing stations
- Providing decontamination areas for boots
- Providing training on zoonotic diseases, basic biosecurity measures and/or identification of unwell animals
- Preparing standard operating procedures for cases of zoonotic disease
- Obtaining and implementing medical advice on vaccinations for staff.

Staff that work with the livestock should be competent stock handlers. They need to be familiar with:

- Zoonotic risks
- Low-stress handling procedures for livestock
- · Identifying animals that that are unwell

- The major diseases likely to affect livestock in an intensive situation
- Biosecurity requirements within the premises
- Legislative requirements to record medications given to animals
- Meat withholding periods and export slaughter intervals
- Restricted animal material (RAM) and the ruminant feed ban (RFB)
- Safe chemical handling
- Appropriate use of PPE
- The requirement to notify in cases of disease or unexplained deaths
- Risks associated with the physical nature of working with livestock (injuries).

References

AUSVETPLAN Manuals and Documents https://www.animalhealthaustralia.com.au/our-publications/ausvetplan-manuals-and-documents/

Australian Standards for the Export of Livestock (Version 2.3) 2011

Farm Biosecurity website - www.farmbiosecurity.com.au

Beef Cattle Feedlots: Design and construction (Watts P.J.et al 2016) www.mla.com.au/research-and-development/feedling-finishing-nutrition/Lotfeedling-intensive-finishing/feedlot-design-manual/

Livestock Production Assurance (LPA) https://www.mla.com.au/meat-safety-and-traceability/red-meat-integrity-system/about-the-livestock-production-assurance-program/

MICOR https://micor.agriculture.gov.au/live-animals/Pages/default.aspx

Management of unfit-to-load livestock (2011) - $\underline{http://www.livecorp.com.au/LC/files/43/43727f94-7535-41ba-a6d7-8d68a97f1708.pdf}$

National Biosecurity Manual for Beef Cattle Feedlots http://www.farmbiosecurity.com.au/wp-content/uploads/2013/10/National-Biosecurity-Manual-for-Beef-Cattle-Feedlots1.pdf

National Farm Biosecurity Manual for Pork Production (August 2013)

National Feedlot Accreditation System (NFAS) http://www.feedlots.com.au/industry/nfas

National Guidelines for Beef Cattle Feedlots in Australia, 3rd Edition https://www.mla.com.au/research-and-development/search-rd-reports/final-report-details/Productivity-On-Farm/National-Guidelines-for-Beef-Cattle-Feedlotsin-Australia-3rd-Edition/956

National Livestock Identification System (NLIS) see https://www.nlis.com.au

National procedures and guidelines for intensive sheep and lamb feeding systems https://www.mla.com.au/globalassets/mla-corporate/extensions-training-and-tools/documents/nationalproceduresandguidelineslambfinishing.pdf

Reference Manual for Pre-Export Quarantine Premises (June 2018)

Restricted animal material (RAM) see https://www.animalhealthaustralia.com.au/what-we-do/disease-surveillance/tse-freedom-assurance-program/australian-ruminant-feed-ban/

Sheep guidelines https://www.dpi.nsw.gov.au/ data/assets/pdf file/0018/111348/water-for-livestock-interpreting-water-quality-tests.pdf

Wilson, S-J., (2014). Developing an on-farm biosecurity plan for your grazing enterprise. Livestock Biosecurity Network. Canberra.

Appendix I. Template biosecurity plan

The following biosecurity template has been adapted from the LPA On-Farm Biosecurity Plan incorporating relevant ASEL requirements specifically relating to Biosecurity. It is recommended that this template be reviewed regularly, and that actions are taken to rectify any issues and gaps to ensure that standard biosecurity practices are implemented through your premises. Further information and detail is provided in the body of the *Biosecurity Manual for Pre Export Quarantine Premises*.

Premises Name:	Owner Name & Phone Number:
Property Address:	Manager Name & Phone Number:
PIC:	Veterinarian Name & Phone Number:
Date:	Local Animal Health Office Number (government):
Review Date (12 months from date above):	Emergency Animal Disease hotline: 1800 675 888
Completed by (name & signature):	

Attach a property map to your plan.

1.	Management of Inputs – Livestock, water, feed							
1.1	Livestock	Recommended Practices	Yes	No	N/A	Comments	Tools & Resources	
	When receiving and identifying livestock, do you obtain a copy of the vendor declarations regarding the property of source and health and welfare status of the livestock before accepting the livestock for the purpose of preparation for export? (ASEL S3.12)	Ensure all incoming livestock are accompanied with a National Vendor Declaration (NVD)/Waybill. Request an Animal Health Declaration (AHD) for further information on livestock health	D	D	D		ASEL National Vendor Declaration Animal Health Declarations	
	Are livestock unloaded as soon as possible after arrival at the registered premises (RP)? Do facilities enable safe and efficient unloading of livestock? (ASEL S3.13a)	Ensure that livestock are unloaded as soon as possible after arrival at the RP. Ensure that facilities are safe and efficient to unload livestock.	D	D	D		ASEL	

		Where possible, minimise the mixing of newly arrived livestock.					
	Are all livestock are individually inspected at unloading to determine whether they are suitable for preparation for export? (ASEL S3.13b)	Ensure that all livestock are individually inspected at unloading to determine whether they are suitable for preparation for export.	D	D	D		ASEL Stock receival & inspection form template
	Are all livestock accepted into the registered premises offered water and feed as soon as possible and no more then 12 hours after arrival? (ASEL S3.14)	Ensure that all livestock are offered water and feed as soon as possible.	D	D	D		ASEL
	Are any livestock identified at unloading as being distressed, injured or otherwise unsuitable for export marked by a permanent method and isolated from the rest of the consignment?	Livestock with any of the criteria in ASEL Appendix 3.1 must be removed from the consignment.	D	D	D		ASEL - Criteria for rejection are outlined in Appendix 3.1.
	Is a record kept that details identity, the method of treatment or euthanasia and disposal of all rejected animals? (ASEL S3.17).	Maintain a record of inspection that details identity, the method of treatment or euthanasia and disposal of all rejected animals.					Farm Biosecurity stock- receival & inspection form
	Are all incoming livestock National Livestock Identification System (NLIS) identified and recorded in accordance with NLIS requirements?	Transfer all livestock the pre-export premises' property identification code (PIC) within 48 hours. Adhere to the NLIS legislation of the state/territory of the premises at all times.	D	D	D		Livestock Export NLIS SOPs NLIS Database Find your state NLIS requirements
	Confirm identification instructions with the exporter, as there may be specific importing country or Exporter requirements?	Adhere to identification instructions provided by the Exporter.					
1.2	Water and Feed	Recommended Practices	Yes	No	N/A	Comments	Tools & Resources
	Are Water troughs: (i) positioned apart from hay and feed sources to prevent fouling?; and (ii) kept clean? (ASEL 3.7(g))	Ensure that water troughs are: - positioned apart from hay and feed sources to prevent fouling; and - that they are cleaned regularly.	D	D	D		ASEL
	Is the water quality suitable for the livestock? Is there sufficient backup storage or a contingency plan to ensure continuity of supply at peak demand for 2 days? (ASEL3.7(h)). Confirm feeding instructions with the Exporter, as	Conduct water quality test. Have a backup up water storage or a contingency plan to ensure continuity of supply at peak demand for 2 days. Receive feeding instructions from the Exporter.	D	D	D		NSW DPI – Water Requirements for Sheep & Cattle
	there may be specific importing country requirements.	The Exporter	U	U			

	Where feed is supplied by the Registered Premises, is it sourced from reputable and reliable suppliers?	Inspect stock feed on arrival and ensure it matches what was ordered (free from pest damage and visual contaminants). Request a Commodity Vendor Declaration (CVD) from the feed supplier.	D	D	D		Visit MLA website for information on the <u>Commodity Vendor</u> <u>Declaration</u> —This provides information about the source of the feed, the use of chemicals and product integrity.
	Is all livestock feed for use at the registered premises stored in a manner that maintains the integrity and nutritional value of the feed, and protects it from weather, pests and external contaminants (including chemical spray drift) and from direct access by animals? (ASEL 3.7(b))	Store feed in a manner that maintains the integrity and nutritional value of the feed, and protects it from weather, pests and external contaminants (including chemical spray drift) and from direct access by animals. Have a disposal plan in place for damaged/contaminated feed.	D	D	D		ASEL
	Where feeders, self-feeders and water troughs are used, are they of a design that allows for complete cleaning of all surfaces, prevents spoilage of feed during inclement weather, and minimises faecal contamination and injuries? (ASEL 3.7(a)).	Design feeders, self-feeders and water troughs to allow for complete cleaning of all surfaces, prevents spoilage of feed during inclement weather, and minimises faecal contamination and injuries.	D	D	D		ASEL
	Is the ban on feeding of animal products to ruminant livestock (Ruminant Feed Ban) complied with?	Restricted Animal Material (RAM) or any material that may contain or may have been in contact with RAM must not be fed to ruminants. Use the RFB checklist.	D	D	D		For more information visit Animal Health Australia Ruminant Feed Ban Ruminant Feed Ban checklist
2	Management of people, vehicles & Equipm	nent			l		
2.1	Management of people, vehicles & Equipment	Recommended Practices	Yes	No	N/A	Comments	Tools & Resources
	Does the operator of the registered premises have arrangements in place at the premises to prevent unauthorised entry and access to the feed when livestock are being prepared for export?	Where reasonable and practical control people, vehicles & equipment entering the premises (i.e. minimise the number of entry points).	D	D	D		
	Access to the premises must be controlled at all times, with:						
	 a) all entry points to premises being clearly signed; 	Provide entry signage & directions to the office for sign-in by all visitors to the premises.					

	 b) only those persons necessary for the dayto-day operation of the premises and state and territory government officials having direct access to the area of the premises; and c) all non-employees reporting to reception for appropriate biosecurity checks relevant to the requirements of the facility (ASEL S3.10). 						
	Are strategies in place to minimise the risk of disease incursion onto the property by people?	Assess all visitors (including contractors) entering the premises for their biosecurity risk. Ensure all visitors entering the premises are directed to a designated meeting place i.e. the	D	D	D		Farm Biosecurity visitor & staff risk assessment
		office. Ensure 'come clean, go clean' practices from all personnel and visitors.					Come Clean, Go Clean factsheet
		Provide entry signage & directions to the office for sign-in.					
		Maintain a register of visitors and vehicles (including contractors) to the premises.					Farm Biosecurity <u>visitor</u> <u>register</u> template
	Are strategies in place to minimise the risk of disease incursion onto the property by vehicles and equipment?	Minimise the lending/movement of equipment between properties. If moved off the premises, clean and disinfect equipment and vehicles.	D	D	D		Vehicle contamination cleaning record template
		Clean and disinfect vehicles and equipment prior to moving from a high-risk area to a low-risk area.					
		Provide clean down equipment/facilities and disinfectant for personnel and visitors to clean their boots and equipment. Mark these areas on the property map.					
3	Management of animals and animal produc	cts	1	ı	ı	,	
3.1	Monitoring Livestock & Animal Health	Recommended Practices	Yes	No	N/A	Comments	Tools & Resources
	Does the daily monitoring of health, welfare and mortality include the following?:		D	D	D		ASEL
	 All livestock must be inspected daily by a competent stock person 	All livestock are inspected daily by a competent stock person.					

b) All sick or injured livestock must be given immediate treatment, and veterinary advice must be sought if the cause of a sickness or injury is not obvious, or if action taken to prevent or treat the problem is ineffective c) Investigation by a registered veterinarian must be conducted if mortalities in any one paddock or shed exceed 0.1% or 3 deaths, whichever is the greater, on any one day for cattle and buffalo, or 0.25% or 3 deaths, whichever is the greater, on any one day for any other species of livestock (ASEL 3.16)	Ensure that all sick or injured livestock are given immediate treatment, and that veterinary advice is sought as required by the ASEL 3.16. Ensure that a registered veterinarian investigates mortalities as required in ASEL 3.16				
Are records of each consignment kept for at least 2 years after the date of export? (ASEL 3.16d).	Records for daily health inspections must include: Record of mortalities, location & identification Record of hospitalised animals and treatments Submission of daily record to Department of Agriculture and Water Resources Regional Office Details of post-mortems including the name of the registered veterinarian(s) and the post-mortem results. Treatment records should at least include: Date of treatment Description, location and number of livestock treated The chemicals used (including trade name, batch number and dose) The relevant Withholding Period (WHP)/Export Slaughter Interval (ESI)	D	D	D	Animal Treatment Record template
How are endemic diseases managed on the premises?	Implement relevant strategies from the <i>Pre-Export</i> **Premises Animal Health Management Plan for managing endemic livestock diseases on the premises.	D	D	D	See the Pre Export Premises Animal Health Management Plan
Does the premises have an Emergency Animal Disease (EAD) plan developed and ready for implementation at any time?	An EAD plan is developed and is ready for implementation.	D	D	D	See appendix III

	Is advice sought from a veterinarian or government officer in relation to any unusual sickness or death event?	Report unusual signs of disease as soon as possible to your veterinarian or local animal health authority.	D	D	D		
3.2	Carcase, Manure & Effluent management	Recommended Practices	Yes	No	N/A	Comments	Tools & Resources
	Are dead livestock collected and disposed of on a daily basis? Animals must not be able to access the area for disposal of carcases (ASEL 3.16c)	Dead stock should be disposed of in accordance with documented procedures that take into account environmental standards and public considerations.	D	D	D		For cattle, aim to satisfy the National Beef Cattle Feedlot Environmental Code of Practice.
		Ensure that carcase & animal wastes are disposed of promptly to an area that cannot be accessed by other animals.					For sheep check the National Procedures and Guidelines for Intensive
		Records for the disposal of carcases should include: - Recording animal identification - Date of disposal - Notification to the exporter (Operations Manual).					Sheep and Lamb Feeding. Systems, section 4.11.
	Where pens are used, are they cleaned at an interval to ensure for efficient production and to minimise odour emissions?	Movements of manure and/or compost removed from the site should be recorded.					The Feedlot industry has published a useful summary of manure management in - Beef cattle feedlots: waste management and utilisation (see page 2 Pen cleaning and Appendix 6, page 3.).
4	Premises Management		•				_
4.1	Fencing	Recommended Practices	Yes	No	N/A	Comments	Tools & Resources
	Is fencing at the premises inspected before the entry of each consignment and twice a week while livestock are in the registered premises? (ASEL 3.6 c).	Internal fences must be adequately maintained to prevent any mixing of livestock within the premises. Perimeter fences must be adequately maintained to prevent any contact of livestock in the premises to stock in adjoining areas.					ASEL
		As much as possible, maintenance should be conducted between consignments.					

	Is there a minimum livestock traffic separation of 2 metres maintained at all times, or are livestock separated by a physical barrier such as a fenced road or lane or a fully fenced empty paddock, unless specified otherwise by the importing country? (ASEL S3.3 b(ii))	The premises is designed and managed to meet the requirements of ASEL 3.3(b)(ii). Confirm separation requirements with the Exporter, as there may be specific importing country requirements.					ASEL
4.2	Management of consignments	Recommended Practices	Yes	No	N/A	Comments	Tools & Resources
	Where a period of pre-export quarantine or isolation is required by the importing country, are animals forming the consignment at all times physically isolated from all other animals (whether for an alternative export market or domestic use) to prevent contact? (ASEL 3.3(a)).	It is vitally important to check the importing country requirements with the Exporter as different destinations have different requirements.					ASEL
	Where handling facilities used for loading, holding, treating or inspecting livestock (including roadway and lanes) are to be used for both domestic and export livestock (including livestock of differing export status), the operator of the premises must have procedures in place to ensure that: (i) handling facilities are not used simultaneously by livestock of differing pre-export quarantine or isolation status; (iii) handling facilities and equipment used by different consignments of animals are managed in accordance with the pre-export quarantine or isolation requirements of each importing country (ASEL 3.3(b))	The premises is designed and managed to meet the requirements of ASEL 3.3(b)(i) & (ii).					ASEL
5	Management of Feral Animals, Pests, Vern	nin & Weeds					
5.1	Management of Feral Animals, Pests, Vermin & Weeds	Recommended Practices	Yes	No	N/A	Comments	Tools & Resources
	Are there documented feral-animal, vermin, wildlife and weed-control programs in operation and do they include monitoring and management activities? (LPA)	Document feral-animal, vermin, wildlife and weed-control plans and implement as required.					
	Are noxious weeds identified & managed?	Noxious weeds are identified and managed according to state regulations					www.farmbiosecurity.com. au/essentials-toolkit/ferals- weeds/

6	Management of Outgoing Product						
6.1	Movement of livestock off the premises	Recommended Practices	Yes	No	N/A	Comments	Tools & Resources
	Are livestock inspected prior to loading and any animal showing signs consistent with the rejection criteria in ASEL, or any other condition that could cause the animal's health and welfare to decline during transport or export preparation, are not transported?	Only livestock fit to travel, which meet importing country requirements, can be loaded for transport to the port of embarkation. The ASEL (s3.8 and s3.9) also provide a range of requirements in relation to the preparation of animals depending on class, geographical region and time of the year.					ASEL Is it fit to Export Guide
	Are all outgoing livestock accompanied with the required documentation?	Complete all required documentation including the NVD/Waybill					
7	Administrative Procedures						
7.1	Training & Staff	Recommended Practices	Yes	No	N/A	Comments	Tools & Resources
	Do all personnel responsible for management and husbandry understand their role in the implementation of biosecurity practices, know how to identify sick and injured livestock and are familiar with the premises' animal health management plan? Do all personnel responsible for management and husbandry know where to find contact details for	Undertake personnel training and instruction on biosecurity animal health and welfare, including disease reporting. Display emergency contact lists in noticeable places on the RP and ensure all staff know where they are. Place EAD Plan and Hotline (1800 675 888) in a common and visible location.					Farm Biosecurity <u>Training</u> <u>record</u>
	the local vet(s) and government animal health officer(s), and what to do in the event of a suspected emergency animal disease?						
	Are all vulnerable personnel working on the property vaccinated for identified risk diseases such as Q Fever and tetanus?	Request vaccination records from staff.					
	Are all hospital and chemical treatments conducted with suitable protective clothing and use of appropriate sanitisation methods?	Ensure that suitable protective clothing and appropriate sanitisation is available for staff. Employees have training in appropriate use of chemicals and medications.					
7.2	Documentation & Record Management	Recommended Practices	Yes	No	N/A	Comments	Tools & Resources
	Do you record animal health activities and treatments to maintain herd/flock health history and provide accurate NVDs and documentation for outgoing livestock?	Record livestock treatments accurately.					

Do you review your farm biosecurity plan annually?	Identify biosecurity activities to be undertaken over the next 12 months.			
	Undertake regular premises inspections for actual or potential biosecurity issues.			
Do you maintain records and documentation in line with previous sections of this template, the premises Operations Manual and other recording requirements for ASEL?	Maintain and retain required records and documentation.			

Appendix II: Emergency animal disease planning Emergency Animal Disease (EAD) Action Plan

An Emergency Animal Disease (EAD) Action Plan is a document that describes the activities and management practices that are to be undertaken by the premises in the event of a suspected emergency animal disease outbreak. The EAD covers the period between the time a disease is first suspected by the premises and the subsequent preliminary confirmation or clearance of an emergency animal disease.

Steps when an emergency animal disease is suspected.

The following 15 key steps are drawn from Farm Biosecurity (2013). This document can be laminated and kept for distribution to staff in the event of an emergency.

- Contact the relevant authority through your district veterinary officer or the emergency animal disease watch hotline 1800 675 888
 Insert relevant Numbers:
- 2. Follow all instructions given by the relevant authority.
- 3. Do not dispatch any livestock from the premises until authorised by the relevant authority.
- 4. Ensure suspect livestock are isolated within the premises.
- 5. Ensure companion animals of the suspect livestock are segregated from the other livestock.
- 6. Ensure movements of all other livestock within the premises, and surrounds, are restricted.
- 7. Delay or halt the shipment of any livestock onto the farm.
- 8. Delay or halt the delivery of all non-essential commodities.
- 9. Secure the farm perimeter, limiting access to the farm and ensuring all vehicles and visitors only enter the farm under controlled conditions.
- 10. Remove unnecessary personnel and machinery from livestock feeding and holding areas.
- 11. Ensure that any personnel, equipment or machinery do not leave the premises until authorised by the relevant authority.
- 12. Compile a list of all livestock (number of head, identification and location), personnel and machinery movements over the past seven (7) days. Prepare a site plan that details the current allocation of livestock.
- 13. Ensure all staff are made aware of the actions being undertaken and their individual responsibilities towards the action plan.
- 14. Ensure that customers are advised if they are immediately affected by the delay in the supply of livestock.
- 15. If an emergency disease is identified, the premises will follow the requirements of AUSVETPLAN and the directions from the relevant authority.