AUSTRALIAN VETERINARY EMERGENCY PLAN

AUSVETPLAN

Resource document

African swine fever response operational guidelines for pig abattoirs

Version 5.0

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1. Introduction

1.1. Context and overview of pig abattoir biosecurity in emergency animal disease preparedness and response

Intensive pork production involves a continuous flow of pigs through farming and processing systems that operate at, or close to, full capacity. Disruption to pig flow through the system at any point, for example to pig movements off farm or flow through abattoirs or chillers, will have immediate and rapidly escalating impacts on animal welfare, supply chain continuity, consumer supply and, ultimately, industry viability. Further, when an abattoir is directly implicated as an infected premises (IP) or dangerous contact processing facility (DCPF), these impacts are likely to be exaggerated due to tracing and movement controls associated with pig and fomite movements (including people and transport) to or from the abattoir.

Ninety per cent of pigs in Australia, including for all major domestic retailers, are processed by 7 export-accredited abattoirs, each of which distribute meat products nationally to interstate destinations. As each of these are functioning at capacity with limited to no capability to absorb additional pigs or to catch up delayed pigs, functional disruption to any one of these major pig abattoirs during an emergency animal disease (EAD) response will have nationwide impacts on response and recovery. It is estimated by pig abattoir stakeholders that, for every week any single major processing plant is closed, it will take 4 to 5 weeks for processing to catch up. With consecutive weeks of closure, it is likely to be beyond the capability of the sector to catch up, leading to industry-wide adverse pig welfare outcomes associated with piggery overstocking. Critical dependencies for abattoir function include pig movements, lairage and chiller capacity, labour force considerations, outgoing meat movements (which may be to interstate destinations), access to rendering, and customer and consumer confidence.

Abattoirs are linked with many premises via vehicle movements. An abattoir contaminated with African swine fever (ASF) virus may generate a significant number of forward traces that will need to be investigated. This may disrupt normal business movements resulting in potential animal welfare issues associated with congestion on farms. Controls at abattoirs are therefore a very important element of the national biosecurity system.

The extent of disruption to pig movements, abattoir function and abattoir capacity to catch up — and consequently, to pig welfare — would be significant (Slatyer et al 2023). Biosecurity controls at abattoirs are therefore critical to avoid disruption. Minimising the role of abattoirs as potential infected pig and contaminated vehicle concentration and crossover points will reduce the likelihood of creating high-risk forward traces and potentially disseminating disease to farms.

In an EAD event, biosecurity controls will underpin assessments by jurisdictional government authorities for abattoirs to function as approved processing facilities (APFs). If an abattoir becomes an IP or DCPF, these controls will underpin resolution of its contaminated status. Operationalisation of biosecurity controls before an EAD incursion may provide a pathway to abattoir pre-assessment, which would support or streamline the risk assessment and official approval process. It may also reduce the risk to forward-trace premises associated with the IP or DCPF.

1.2. This document

1.2.1. Purpose

As part of AUSVETPLAN (the Australian Veterinary Emergency Plan), this resource document has been developed to assist pig industry and EAD preparedness and response personnel to understand abattoir biosecurity preparedness and response to ASF virus. Together with the other AUSVETPLAN manuals, it supports preparedness functions and helps ensure that an efficient and effective response can be implemented consistently across Australia with minimal delay.

Specifically, this resource document outlines appropriate biosecurity control measures to support jurisdictional government authorities in assessing and allocating premises classifications in an ASF response for:

- resolution of an abattoir that is classified as a DCPF or IP
- an APF
- an abattoir used to depopulate high-risk (potentially exposed or infected) pigs.

To achieve these aims, this document:

- recognises the importance of minimising the role of pig abattoirs as a focal point for fomite spread of ASF to susceptible piggeries and feral pigs
- recognises the impacts to pig welfare, the supply chain and consumers resulting from extended shutdowns or other disruption to gaining/regaining premises approvals to process pigs
- recognises the value of understanding (and, where possible, implementing), in advance, biosecurity controls that an abattoir may need when in operation, in an EAD response and during recovery
- provides guidance to pig abattoirs to implement and pre-assess biosecurity controls as a key component of supply chain preparedness
- recognises the potential role of an abattoir in assisting depopulation of piggeries, and biosecurity considerations in how this might be managed.

1.2.2. Scope

This document focuses on identifying and mitigating potential pathways for exposure of pigs to ASF virus, and on reducing the likelihood of ASF virus spread arising from contamination of an abattoir.

The scope of guidance provided extends to both domestic and export pig abattoirs. The guidance may be more difficult to implement for some domestic abattoirs, given reduced regulatory oversight in day-to-day operations and increased variation in setup compared to export-registered establishments. Also, some control options offering equivalence in biosecurity outcomes may be available to smaller, domestic abattoirs that are impractical for larger abattoirs. It is recommended that risk assessment and classification of all abattoirs be undertaken on an abattoir-by-abattoir basis, and that an outcomes-based approach be taken that considers control options that deliver equivalence in biosecurity outcomes. While the principles applied in developing this document are not species specific, the scope extends specifically to biosecurity controls for pig abattoirs to support assessment and allocation of premises classifications by jurisdictional government authorities in the following ASF scenarios:

- resolution of an IP or a DCPF to a resolved premises (RP)
- progression of an RP or unclassified processing facility (UPF) to an APF
- additional biosecurity considerations for an abattoir that is assisting depopulation of infected herds.

Establishment and validation of control systems can take considerable time and expenditure, especially when construction or modification of facilities is required (for example, construction of transport decontamination infrastructure). In addition, many control measures will require training of personnel to conduct the procedures, and establishment of appropriate auditing systems. When taken together, the establishment of capacity to achieve the required suite of abattoir controls is acknowledged as a preparedness function, not a response function when an outbreak is declared.

This especially applies when time-sensitive processing of pigs is required (for example, when pig premises do not have spare capacity to hold pigs). Therefore, this document provides clear guidance to the pork supply chain so that control activities may be undertaken as a preparedness function, with potential for pre-assessment to occur in advance of an ASF response.

1.2.3. Development

In early 2020 an Animal Health Committee (AHC) ASF Taskforce Working Group comprising representatives from state and Commonwealth jurisdictions and each of Australia's 7 export pork abattoirs prepared an *Incident action plan guidance document for the resolution of an abattoir designated as an infected premise or dangerous contact processing facility in an African swine fever (ASF) outbreak*. In September 2020 AHC endorsed this guidance, agreed that it be provided for incorporation into AUSVETPLAN, and requested that industry assist with operationalising the incident action plan. In addition, AHC requested that Australian Pork Limited (APL), the ASF technical panel and ASF liaison officers address the following matters¹:

- 1. Develop documentation for the biosecurity requirements of an APF.
- 2. Develop documentation for the biosecurity requirements of a DCPF abattoir used for outbreak response depopulation.
- 3. Develop an action plan for resolving an export abattoir from an IP or a DCPF to an RP.

Subsequently, in late 2020 and early 2021 outputs from the then Department of Agriculture, Water and the Environment's (DAWE's) national exercise, Exercise Razorback, reinforced the critical role played by abattoirs in response and recovery to an ASF incursion.

To respond to the requests from AHC and DAWE, an industry-led working group that included representatives from all export pig abattoirs, DAWE veterinary staff with abattoir expertise, Biosecurity South Australia, an industry specialist consultant, and members of APL's ASF technical panel (Appendix 1) was formed to undertake a biosecurity exposure assessment for pig abattoirs. At a workshop held in Adelaide on 28 May 2021, participants used a standard risk management approach to establish and analyse pathways for ASF exposure and spread, and to propose plausible controls to manage incoming and outgoing sources of ASF contamination. Biosecurity controls were thus able to be established to address the matters tasked by AHC and DAWE.

A report was prepared for AHC titled *Abattoir biosecurity controls – emergency animal disease response operational guidelines for pig abattoirs.*² In late 2021 AHC noted the report and, in an out-ofsession resolution paper, it was suggested that some sections of the report be presented to AHC for endorsement by Animal Health Australia and the AUSVETPLAN Technical Working Group. These sections, which are conveyed in this document, are:

- the biosecurity controls required to resolve a DCPF and to operate as an APF
- abattoir biosecurity controls for depopulation of infected herds

¹ AHC38_00S15

² AHC41_00S08

• an abattoir biosecurity checklist to support resolution of an abattoir from a DCPF and operating as an APF.

This document has been produced in accordance with the procedures described in the AUSVETPLAN *Overview* document and in consultation with Australian national, state and territory government representatives; the relevant livestock industries; and nongovernment agencies.

1.3. Other documentation

This resource document should be read and implemented in conjunction with:

- other AUSVETPLAN documents, including the response strategies; operational, enterprise and management manuals; and any relevant guidance and resource documents. The complete series of manuals is available on the Animal Health Australia website³
- relevant nationally agreed standard operating procedures (NASOPs).⁴ These procedures complement AUSVETPLAN and describe in detail specific actions undertaken during a response to an incident. NASOPs have been developed for use by jurisdictions during responses to EAD incidents and emergencies
- relevant jurisdictional or industry policies, response plans, standard operating procedures and work instructions
- relevant Commonwealth and jurisdictional legislation, and legal agreements (such as the Emergency Animal Disease Response Agreement⁵, where applicable)
- AHC Incident action plan guidance document for the resolution of an abattoir designated as an infected premises or dangerous contact processing facility in an African swine fever (ASF) outbreak.

1.4. Training resources

1.4.1. Emergency animal disease preparedness and response arrangements in Australia

The online EAD foundation course⁶ provides livestock producers, veterinarians, veterinary students, government personnel and emergency workers with foundation knowledge for further training in EAD preparedness and response in Australia.

³ https://animalhealthaustralia.com.au/ausvetplan

 $^{{}^4\,}https://animalhealthaustralia.com.au/nationally-agreed-standard-operating-procedures$

⁵ https://animalhealthaustralia.com.au/eadra

⁶ https://animalhealthaustralia.com.au/online-training-courses

2. Derivation of appropriate biosecurity controls

Biosecurity controls presented in this document have been identified and developed using a combination of hazard analysis critical control point (HACCP), good agricultural practices (GAP) and good manufacturing practice (GMP) approaches. These control systems are widely used in abattoir day-to-day operations for assuring meat safety. Consequently, abattoir personnel are very experienced in validating the effectiveness of control measures and establishing verification systems to support auditing.

HACCP is a safety system where the HACCP team identifies hazard-associated control or critical control points, and their verification and monitoring. A control or critical control point is a step necessary to minimise or eliminate exposure to a hazard. A 'HACCP-based' approach was applied in the development of this document as not all HACCP steps were utilised. This resulted in a series of controls (hurdles) that add to others across the supply chain to minimise the likelihood of exposure of susceptible animals to African swine fever (ASF), and that reduce the likelihood of ASF spread from an abattoir.

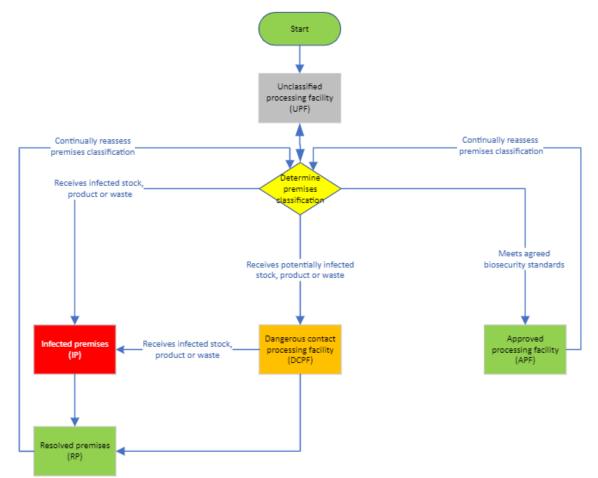
GAP and GMP are guidelines or principles that, when employed, establish safe practice and reduce risk. The application of GAP or GMP can be effective in significantly lowering the level of identified hazards, achieving the same outcome as a control.

The approach taken in the development of this document included:

- hazard analysis
- determination of which hazards can be controlled (or the risk lowered by GAP and GMP)
- establishing limits
- monitoring, corrective action and documentation procedures
- verification.

The resolution of an infected premises (IP) or a dangerous contact processing facility (DCPF) to a resolved premises (RP), or the progression of an RP or unclassified processing facility (UPF) to an APF, are subject to meeting defined biosecurity criteria and jurisdictional approval. This process flow is demonstrated in Figure 2.1 and provided perspective for the analysis and evaluation undertaken to develop the guidance provided in this document. The scenarios evidenced in Figure 2.1 best encompass the core abattoir biosecurity controls likely to be required in an ASF response. Aspects of bio-exclusion, biomanagement and biocontainment were also considered.

Figure 2.1 The pathway from a UPF to an IP, DCPF or APF in an ASF response



Note: An IP or DCPF may be resolved (become an RP) and progress to an APF or DCPF. An abattoir may retain its IP status or be designated as an IP to assist with depopulation of pigs from a known infected piggery premises. UPFs may also progress directly to an APF subject to meeting agreed biosecurity standards and government approval.

For an abattoir assisting depopulation of an infected herd, additional consideration has been given to escalating the core controls due to a potentially higher level of known incoming ASF contamination and additional disposal requirements.

A standard risk management approach is used at a high or conceptual level, as demonstrated in Figure 2.2.

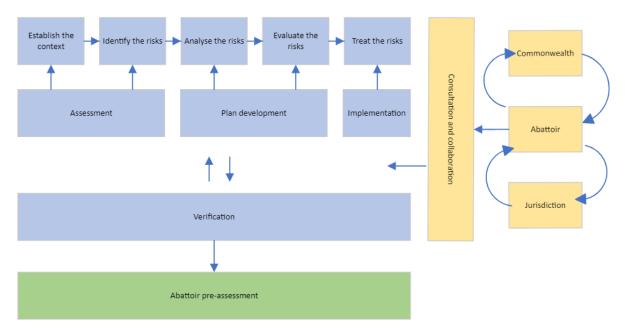


Figure 2.2 Risk management process including engagement and consultation

Guided by these high-level risk management principles, the following approach was taken to identify core abattoir biosecurity controls. It is recommended that this approach is also taken to operationalise the controls.

- 1. A diagram of abattoir incomings and outgoings was prepared to identify potential pathways of exposure of susceptible animals to ASF virus (Figure 2.3).
- 2. ASF virus exposure pathways presented by identified incomings and outgoings were analysed and evaluated, and controls were established for sources of contamination. A series of 'go/no-go' steps were applied to these proposed controls to validate their plausibility. Go/no go steps involved several considerations, specifically:
 - a. Technical What is the likelihood of virus transmission to susceptible animals? This is considered especially important for in-abattoir equipment and with the knowledge that the product itself may not be subject to recall.
 - b. Operational Is this control already in place? Operationalisation status and the practicality of implementation was considered.
 - c. Existing compliance or regulatory controls Are compliance rules or arrangements in place, for example standards (ie AS 4696:2023 food safety standard⁷), legislation (ie *Export Control (Meat and Meat Products) Rules 2021*), approved arrangements⁸, and quality assurance (eg Australian Pork Industry quality assurance, or APIQ⁹) or market-based requirements, that may be leveraged if they also appropriately mitigate ASF risks? For example, the principles underpinning the regulatory framework for food-producing establishments have been applied in selecting abattoir biosecurity controls in this document.

⁷ https://store.standards.org.au/product/as-4696-2023

 $^{^8\,}www.a griculture.gov.au/biosecurity-trade/export/controlled-goods/meat/elmer-3/aa-guidelines-meat/aa-guidelines-meat/elmer-3/aa-guidelines-3/aa-guidelines-ameat/elmer-3/aa-guidelines-ameat/elmer-3/aa-guide$

⁹ https://australianpork.com.au/apiq

- 3. Verification activities and status for controls for export abattoirs were described. Verification involves a combination of:
 - a. prior review and testing of the documented control process and records
 - b. direct periodic audit of the process in action
 - c. review of site and documentation upon completion of the control action.
- 4. Biosecurity controls were thus able to be established to support assessment and allocation of premises classifications by jurisdictional government authorities for:
 - a. resolution of an IP or DCPF to an RP
 - b. establishment of an APF from either an RP or UPF classification to operate during an ASF response
 - c. processing high-risk pigs to support outbreak response depopulation.

The distinction between biosecurity controls for resolving an IP or DCPF to an RP and operating as an APF are provided in Appendix 2. This is expressly written for government officials to determine which controls are appropriate for the different scenarios.

Biosecurity mitigation activities addressing how abattoirs can comply with the controls outlined in Appendix 2 are provided in Appendix 3. This is expressly written for abattoir personnel to implement the appropriate controls or mitigation measures.

Recommendations for a pig transport decontamination facility are provided in Appendix 4. This is written for both government officials and abattoir personnel to assist operationalisation of biosecurity controls involving transport decontamination.

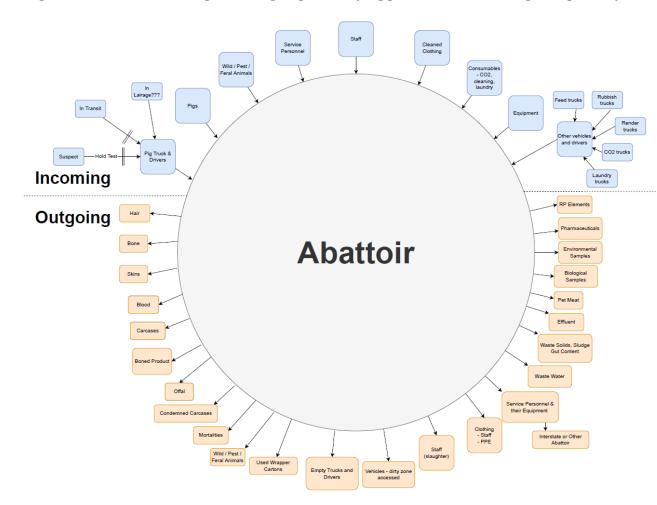


Figure 2.3 Abattoir incomings and outgoings identifying potential sources or spread pathways of exposure of susceptible animals to ASF virus

Note: RP elements are outgoing items specifically associated with the resolution of a contaminated premises.

3. Abattoir African swine fever biosecurity control and verification activities

3.1. Overview

This section contains prioritised control and verification activities to mitigate the likelihood of:

- African swine fever (ASF) virus being introduced to pig abattoirs
- exposure of susceptible animals to ASF virus
- ASF virus spread via abattoir outgoings.

These activities support assessment and allocation of premises classifications by jurisdictional government authorities for the following purposes:

- resolving a dangerous contact processing facility (DCPF) to a resolved premises (RP)
- operating as an approved processing facility (APF) in an ASF response irrespective of location within a declared area
- assisting depopulation of potentially contaminated pigs in an ASF response.

These controls are technically relevant to both export and domestic pig abattoirs.

This section is supported by Appendixes 1, 2 and 3, which include checklists on biosecurity controls for the different scenarios and for abattoir biosecurity mitigation activities, and specific guidance on pig transport decontamination. Refer to Section 2 for additional context on these appendixes.

3.1.1. Biosecurity controls for resolving a dangerous contact processing facility

Although abattoirs must consider all the controls for identified exposure pathways, the following are prioritised control and verification activities to mitigate the likelihood of exposure of susceptible animals to ASF virus, and to reduce the likelihood of ASF virus spread (Appendix 3).

- 1. There is controlled entry and exit, including the following controls:
 - Site entry is restricted to approved vehicles, drivers, personnel, visitors and equipment.
 - Vehicles, drivers, visitors and personnel are logged in and out.
 - Biosecure onsite vehicle decontamination is in place, including inside the truck cab, before exiting the facility (or at an audited offsite equivalent before the next entry to a farm).
 - Boots, protective outerwear, handwashing and showering facilities are provided to drivers and abattoir personnel on a risk-assessed basis, and drivers and personnel must comply with existing movement protocols within the abattoir precinct.
 - A risk assessment has been undertaken (including consideration of access to susceptible animals outside the workplace) and exit protocols are implemented for personnel, visitors and equipment.
 - If assessed as required, drivers should shower onsite before exiting (or at an audited offsite equivalent before the next entry to a farm) or remain in vehicles to minimise exposure at the abattoir.
 - A vehicle inspection point is in place.
- 2. Decontamination has been undertaken for the lairage and unloading area to address the risk of ASF virus transmission.

- 3. The abattoir is decontaminated followed by pre-operations assessment. Standard operating procedures specific to individual abattoirs should be referred to.
- 4. Strategies are in place to manage animals onsite, in transit and pending movements from farm to abattoir. Contingency plans, developed and implemented by the abattoir, should provide guidance on appropriate actions for each of the following:
 - Pigs in abattoir lairage from infected premises (IP), dangerous contact premises (DCP), suspect premises (SP), trace premises (TP), at-risk premises (ARP), premises of relevance (POR) and outside area (OA)
 - Pigs in transit from IP, DCP, SP, TP, ARP, POR, OA and interstate
 - Pigs on farms due for load-out within 24–48 hours
 - Animal welfare considerations for pigs in transit and where offsite holding capacity may be required
 - Truck scheduling logistics.
- 5. Approved (detergent and disinfectant) chemicals are used to decontaminate processing equipment and internal structures, considering:
 - suitability and requirement for different plant and equipment
 - type
 - use
 - application method and concentrations
 - supply.
- 6. Virus-contaminated product is managed through disposal, appropriate treatment and/or decontamination.
- 7. Risk assessment, tracing and, where necessary, management or decontamination protocols are in place for outgoings including edible and inedible product, solid and liquid wastes (including effluent and wastewater) and laundry.
- 8. Other species are controlled or excluded:
 - Insects, vermin and birds are controlled in accordance with the Australian Standard AS 4696:2023 Hygienic Production and Transportation of Meat and Meat Products for Human Consumption.
 - Domestic, feral and wild animals are excluded in accordance with the Australian Standard AS 4696:2023 Hygienic Production and Transportation of Meat and Meat Products for Human Consumption.
- 9. A government inspector (or delegate) conducts a property inspection and certification of decontamination.

3.1.2. Biosecurity controls for establishing and maintaining an approved processing facility

Supplementary biosecurity control and verification activities identified to support transition of an RP or unclassified processing facility to an APF include the following requirements. These controls are to be applied in addition to the controls provided in Section 3.1.1 of this document.

- 1. Premises are secured to prevent the entrance of nonauthorised persons or susceptible animals.
- 2. Clean, transition and dirty abattoir zones are assigned, marked clearly and monitored.
- 3. Internal roads and routes are defined, marked and monitored.
- 4. Vehicles and drivers are monitored for compliance with abattoir zones and internal travel routes.

- 5. Pig trucks, other vehicles and drivers that have accessed dirty or transition zones must have:
 - compliance with permit conditions when relevant
 - been reviewed and approved before access to ensure suitability for decontamination upon exit (eg impervious base)
 - pig receival processes to ensure no driver has access to the lairage this may include consideration of abattoir employees rather than drivers unloading pigs
 - compliance with requirements, determined on a risk-assessed basis, for personal protective outerwear, boots, handwashing on exit from unloading, and showering on exit from the dirty zone
 - compliance with protocols addressing movement within the abattoir precinct
 - vehicle onsite decontamination (either at a vehicle inspection point or at an audited offsite equivalent before the next on-farm pickup) (Appendix 4), including inside the vehicle cab this may include consideration of abattoir employees rather than drivers washing and disinfecting vehicles
 - if the driver has unloaded pigs or washed or decontaminated their vehicle, compliance with onsite showering before exiting (or at audited offsite equivalent before the next on-farm pickup) as required
 - driver protocols including consideration to outcomes of a risk assessment to establish contact with susceptible species outside the abattoir.
- 6. Pig delivery trucks entering the abattoir site must:
 - provide advance notice and be pre-approved by the abattoir
 - have a valid movement permit
 - be supervised by abattoir personnel
 - have all pigs identified by an appropriate identifier as per jurisdictional legislation, or as recommended or agreed by jurisdictional chief veterinary officers this may include the use of shoulder tattoo brands to assist with traceability during a response.
- 7. The lairage must have the capacity to segregate suspect pigs from direct contact with other pigs.
- 8. Antemortem and, when required, postmortem inspection, and the reporting and sampling or testing of suspect pigs, must be done by a person approved by the jurisdiction.
- 9. Key post-plant material exit management and end-of-process reports must be completed and include:
 - the outcomes for animals delivered
 - reconciliation of consignments against movement permits (pig receivals to close out PigPass and movement permit processes)
 - outward movements of inedible and edible product
 - outgoing solid, liquid and consumable wastes, and laundry.
- 10. Personnel protocols must include:
 - risk assessments for each role or position and entry protocols for people/staff and equipment
 - a register of staff access to susceptible animals outside of work.
- 11. Processing equipment (eg knives, aprons, gloves), clothes and protective equipment must not be removed from the plant unless they are decontaminated, as laundry, or are being sent directly to an approved disposal site (ADS) for destruction and disposal.

- 12. Effluent must be managed in such a way to prevent exposure of susceptible animals to ASF virus and reduce the likelihood of ASF virus spread by manure, bedding and feed.
- 13. Renderers and other facilities taking abattoir outgoings should be risk-assessed and an appropriate status applied.
- 14. Laundry and site waste protocols must be in place.
- 15. Personnel are assigned and responsible for managing scheduled movement and other activities including:
 - pigs and pig trucks
 - employees (eg A team, B team)
 - cleaning
 - waste disposal.

3.1.3. Abattoir biosecurity controls for destruction of pigs from infected herds

Biosecurity controls and the capacity to assist depopulation are influenced by several key elements.

- 1. The capacity for an abattoir and government that are collaborating to use the abattoir to process as a DCPF, to rapidly resolve and reclassify the abattoir back to an APF. There should be no minimum 'stand-down' time that an abattoir must be nonoperational for following completion and verification of activities to an appropriate standard that supports resolution and reclassification. Ongoing abattoir demand during a disease incursion and the need to depopulate may be sufficiently high that pigs from premises being depopulated may need to be processed daily or several times a week. This must be balanced against competing needs for the abattoir to process pigs from premises not being depopulated. Hence abattoirs involved in depopulation should have capacity to rapidly resolve and reclassify from a DCPF back to an APF as quickly as possible.
- 2. The potential to absorb processing (destruction only) into a second shift at the back end of certain day(s) of the week or other periodic setup with skeleton staff. This allows the plant to meet the needs of customers while also assisting the depopulation process. In both cases, this has positive biosecurity and welfare implications for pigs and producers. It recognises the limited capacity for processing at scale and with tightly controlled biosecurity beyond the 7 export abattoirs in Australia.
- 3. The need to address animal welfare provisions.
- 4. The proximity of the abattoir to:
 - other operations where susceptible animals are housed or handled
 - the premises to be depopulated
 - the disposal site.

Proximity will affect the capacity to move stock in and out of the abattoir with the vehicles that are available.

- Approval of the destruction method to be applied during the response. For biosecurity and logistical reasons, the preference is to use carbon dioxide for destruction. Refer to the AUSVETPLAN Operational manual: Destruction of animals for further information on destruction methods.
- 6. The fact that all pigs will be condemned. Hence there is a need to consider the disposal method, including transportation of contaminated dead pigs to approved disposal sites, transport conditions and routes of travel.
- 7. That neither antemortem nor postmortem inspection will be required for food safety purposes, noting that veterinary supervision may be required to collect epidemiological information and/or to ensure pig welfare. Government supervision will be required to verify

that depopulation occurs as approved, and to assist resolution of the abattoir status after decontamination.

- 8. The capacity of the abattoir to:
 - accommodate, handle and destroy pigs of the sizes requiring depopulation
 - modify infrastructure to divert pigs into disposal vehicles without transit through the body of the abattoir
 - modify systems to minimise the time in lairage and, where possible, to run pigs directly off the truck to slaughter.
- 9. The capacity of the abattoir to exclude access to 'clean' parts of the abattoir beyond the destruction and disposal station.
- 10. The ability to maintain minimum personnel onsite and to ensure personnel decontamination on a risk-assessed basis.
- 11. The capacity of the abattoir to undertake vehicle decontamination, including the truck cabin, before leaving the facility, and for drivers to shower before exiting.
- 12. The likelihood that the abattoir ASF contamination level is relatively low given:
 - only pigs that are fit to load and show no visible signs of ASF would be transported for destruction at an abattoir
 - time onsite and in lairage would be minimised
 - where possible, carcasses should not progress past the stunning/bleeding area of the abattoir.
- 13. Planned depopulation of infected herds in abattoirs will not require access to the entire abattoir chain. Therefore, resolution of the abattoir to its previous status will only need to address contamination risks associated with those areas used for depopulation (for example, decontamination of lairage). This will be influenced by the availability of approved disinfectants that can be practically applied in an abattoir context and that achieve the desired outcome within an acceptable timeframe.

Matters for additional consideration by responding jurisdictions include the following:

- 1. Where they are present, the on-plant veterinarian (OPV) in an abattoir processing pigs may be able to support oversight of depopulation processes.
 - The OPV might pivot from usual tasks but draw on their skill set to assist verification of procedures and plan implementation to assist status resolution.
 - If the OPV can be engaged in verification, plan implementation and welfare monitoring in the abattoir, this would be a preferable arrangement under agreement with the jurisdiction rather than using state veterinary officers who may be better used elsewhere in the response.
- 2. Further work to investigate the viability of infrastructure modifications to support an abattoir assisting contaminated pig depopulation is strongly advocated before an ASF incident, and has been identified as a possible industry-led activity. If deemed viable, testing and exercising the process is also advocated.
- 3. It is important to note that, while it may be technically feasible to use an abattoir to assist a depopulation and then rapidly resolve it back to an APF, in an ASF response there will be a wider set of considerations to determine the feasibility of implementing such a step. These include commercial and logistical considerations.

3.2. Verification

Assessment and allocation of premises classifications, such as RP or APF, will be undertaken by the responding jurisdiction.

To determine whether the HACCP system is working correctly, verification procedures must be established. Verification of controls includes:

- 1. documentation of processes for each control
- 2. periodic audit oversight of both the documentation and the process in action
- 3. tests including random sampling and analysis
- 4. review and adjustment of processes and documentation as required, and in response to audit oversight and feedback.

These processes should be undertaken at a frequency sufficient to ensure that the HACCP system is working effectively.

Verification at export premises may be facilitated or supported by the Commonwealth OPV at the site. Given reduced regulatory oversight and increased variation in setup, it is recommended that verification for domestic abattoirs be assessed on an abattoir-by-abattoir basis, and that an outcomes-based approach considering control options that deliver equivalence in biosecurity outcomes be taken.

3.3. Other considerations

The implementation of biosecurity controls is supported by communications:

- with the local control centre
- about delivery and verification of the biosecurity controls to staff, and ensuring personnel are aware of their responsibilities
- providing briefings about the ASF response and control plan progress
- having competent industry liaison officers
- being adequate with abattoir personnel.

These controls will be supported by

- sufficient, competent and authorised personnel that oversee site verification and liaise with local control centres and state coordination centres
- employee training and awareness sessions.

Appendix 1: Working Group members

The following organisations contributed to this document:

- Agriculture Victoria
- AP Food Integrity Pty Ltd
- Australian Government Department of Agriculture, Fisheries and Forestry Meat Export Program
- Australian Pork Limited
- Big River Pork
- Biosecurity Advisory Services
- Biosecurity South Australia
- New South Wales Department of Primary Industries
- Rivalea Australia
- Ross Cutler and Associates
- Seven Point Australian Pork
- SunPork Group
- Swickers Kingaroy Bacon Factory.

Appendix 2: Summary of pig abattoir African swine fever biosecurity controls

This checklist distinguishes between the biosecurity controls for resolving an infected premises (IP) or a dangerous contact processing facility (DCPF) to a resolved premises (RP) and for operating as an approved processing facility (APF). It is expressly written for government officials to determine which controls are appropriate for the different scenarios.

Number	Item	Resolve DCPF/IP	Establish APF
1	 There is controlled entry and exit using the following controls: Site entry is restricted to approved vehicles, drivers, personnel, visitors and equipment. An entry and exit register is in place for vehicles, drivers and personnel. Onsite vehicle decontamination (or an audited offsite equivalent before the next on-farm pickup) is in place, including inside the vehicle cab. Boots, protective outerwear, handwashing and showering facilities are provided for and used by drivers and personnel on a risk-assessed basis. It is ensured that drivers and personnel comply with existing movement protocols within the abattoir precinct. If required, driver showering occurs onsite before exiting (or at an audited offsite equivalent before the next on-farm pickup) when the driver has unloaded pigs and washed or decontaminated their vehicle. A risk assessment has been undertaken by the abattoir (including consideration of access to susceptible animals outside the workplace) and exit protocols for personnel and equipment are implemented. (Preferably, equipment and clothing used onsite is not removed. If it must be removed, there is a decontamination step before exiting.) A risk assessment of incoming equipment is undertaken when required. 		
2	Lairage, unloading area and road decontamination is undertaken.	\checkmark	~
3	 Abattoir and equipment decontamination and pre-operations assessment are undertaken, including: property inspection of the abattoir site and verification of premises classification (resolution of an IP or a DCPF, or classification as an APF) 	\checkmark	~

Number	Item	Resolve DCPF/IP	Establish APF
	 review, oversight and monitoring to verify the ongoing APF premises classification. 		
4	Personnel undertake:	\checkmark	~
	 decontamination compliance with movement restrictions and conditions. 		
5	 Live pig contingencies have been developed by the abattoir and are in place, including guidance on appropriate actions for each of the following: pigs in lairage from IP, dangerous contact premises (DCP), suspect premises (SP), trace premises (TP), at-risk 	✓	~
	 premises (ARP), premises of relevance (POR) and outside area (OA) pigs in transit from IP, DCP, SP, TP, ARP, POR, OA and interstate pigs on farms scheduled for load-out and processing within 24–48 hours of the outbreak becoming known pigs on farms due for load-out after the first 48 hours of an outbreak impacting the abattoir animal welfare considerations for pigs in transit and where offsite holding capacity may be required truck scheduling logistics. 		
6	 Appropriate (detergent and disinfectant) chemicals are used for decontamination, considering: suitability and requirement for different plant and equipment type use application method and concentrations supply. 	~	~
7	Virus-contaminated product (including carcase, offal and byproduct) is identified and managed. A disposal plan is in place.	~	~
8	 Risk assessment and, where necessary, management protocols (including traceability) are in place for outgoings including: edible and inedible materials 	~	~
	solid and liquid wasteslaundry		

Number	Item	Resolve DCPF/IP	Establish APF
	effluent and wastewater.		
9	Other species are controlled or excluded in accordance with the Australian Standard AS 4696:2023 Hygienic Production and Transportation of Meat and Meat Products for Human Consumption, including the following:	~	~
	insect, vermin and birdsdomestic, feral and wild animals.		
10	The decontamination of the premises is inspected and verified.	~	~
11	The premises is secure and entry of nonauthorised persons, vehicles and susceptible animals is prevented.	~	~
12	Abattoir segregation zones are assigned, demarcated and monitored as clean, transition and dirty.		~
13	Internal roads and travel routes are defined, demarcated and monitored.		~
14	 Abattoir vehicles and drivers are monitored for: route compliance zone compliance. Pig trucks, other vehicles and drivers that have accessed dirty or transition zones are monitored for: permit compliance when relevant vehicle pre-assessment to ensure suitability for decontamination pig receival processes to ensure no driver has access to the lairage — this may include consideration of abattoir employees rather than drivers unloading pigs compliance with requirements, determined on a risk-assessed basis, for personal protective clothing, boots, and handwashing and/or showering at unloading and in transition, dirty and exit (decontamination) zones compliance with protocols addressing movement within the abattoir precinct vehicle onsite decontamination processes (or an audited offsite equivalent before the next on-farm pickup) (Appendix 4), including inside the vehicle cab. This may 		

Number	Item	Resolve DCPF/IP	Establish APF
	 include consideration of abattoir employees rather than drivers washing and disinfecting vehicles compliance with onsite showering before exiting (or at an audited offsite equivalent before the next on-farm pickup) when the driver has unloaded pigs or washed or decontaminated their vehicle the presence of vehicle inspection point(s) and processes exposure of personnel to susceptible animals outside the abattoir, and compliance with associated (risk-based) entry and exit protocols. 		
15	 Pig delivery trucks entering the abattoir site: provide advance notice and are pre-approved by the abattoir have a valid movement permit are supervised by the abattoir have all pigs identified by an appropriate identifier as per jurisdictional legislation — this may include the use of shoulder tattoo brands to assist with traceability during a response. 		~
16	The lairage has capacity to segregate suspect pigs from direct contact with other pigs.		✓
17	Antemortem and, when required, postmortem inspection, and the reporting and sampling or testing of suspect pigs, are undertaken by a person authorised by the jurisdiction.		 Image: A start of the start of
18	 Key post-abattoir material exit management and end-of-process reports include: the outcomes for animals delivered reconciliation of consignments against movement permits (pig receivals to close out permit processes) outward movements of inedible and edible product outgoing solid, liquid and consumable wastes, and laundry. 		✓
19	 Personnel protocols are in place that include: risk assessments for the spread of African swine fever (ASF) virus by individual roles within the abattoir entry and exit protocols for people and equipment whose roles are assessed to be medium or high risk 		~

Number	Item	Resolve DCPF/IP	Establish APF
	• a register of personnel access to susceptible animals outside of work and, where it exists, entry and exit protocols to manage exposure likelihood to/from the abattoir.		
20	Processing equipment (eg knives, aprons, gloves), clothes and protective equipment are not removed from the abattoir unless they are decontaminated, as laundry, or are being sent for destruction and disposal at an approved site.		~
21	Effluent and wastewater are managed in such a way to prevent exposure of susceptible animals to ASF and reduce the likelihood of ASF spread by manure, bedding and feed.		~
22	Renderers and other post-abattoir affiliated facilities taking abattoir outgoings are classified as an APF or are otherwise appropriately risk-assessed.		~
23	Risk-based laundry and site waste protocols are in place.		✓
24	 Scheduling activities include: pigs and pig trucks employees (eg A team, B team) cleaning waste disposal laundry an identifiable structure with delegated responsibilities and roles to manage the process. 		~
25	 Communications and human resourcing functions are in place, including: daily briefings to inform and raise awareness of abattoir personnel adequate liaison with government sufficient, competent and authorised personnel to oversee site verification and premises classification(s) liaison within the response allocation by the abattoir of sufficient, competent and authorised personnel authorised personnel to support training and awareness. 		✓

Appendix 3: Abattoir African swine fever biosecurity control activities checklist resolving a dangerous contact processing facility and operating as an approved processing facility

Biosecurity refers to measures and methods that prevent the introduction and spread of pathogens. Biosecurity includes:

- bioexclusion measures to prevent the introduction of new pathogens
- biomanagement measures to reduce the spread of pathogens on or within premises already contaminated
- biocontainment measures to prevent the spread of pathogens to other animal populations.

Biosecurity at abattoirs aligns with hazard analysis critical control point (HACCP) food safety systems, good agricultural practices (GAP), good manufacturing practice (GMP) and site security measures.

The following checklist supports the development and implementation of an abattoir incident action plan to resolve an infected premises (IP) or dangerous contact processing facility (DCPF), or when a pig abattoir is operating as an approved processing facility (APF).

The checklist aligns with guidance incorporated into Australia's nationally agreed approach for the response to an African swine fever (ASF) outbreak (AUSVETPLAN).

The assessment and allocation of premises classifications, such as resolved premises (RP) and APF, are the responsibility of jurisdictional government authorities.

The checklist includes biosecurity activities to address so that abattoirs can conform with ASF biosecurity controls (Appendix 2). It is primarily directed at abattoirs and industry and provides details of how the biosecurity controls for different abattoir classifications (eg RP or APF) might be implemented.

Controlled access

- □ The premises is secure and entry of nonauthorised persons, vehicles and susceptible animals is prevented.
- □ Abattoir segregation zones are assigned, demarcated and monitored as clean, transition and dirty.
- □ Internal road routes are demarcated and monitored.
- □ An entry/exit register is in place for vehicles, drivers and personnel.
- □ Equipment protocols are in place.
 - Processing equipment and clothing used onsite are not to be removed unless they are decontaminated, as laundry or are being sent for destruction and disposal at an approved site.
 - □ A risk assessment of incoming equipment is undertaken when required.

Personnel and drivers

- □ Boots, protective outerwear, and handwashing and showering facilities are provided for and used by drivers and personnel as required.
- Personal protective equipment (PPE) is provided and used at unloading and in dirty, transition and decontamination zones.
- □ Protocols addressing movement within the abattoir precinct are provided and followed.
- A register of susceptible animal contact outside the workplace is maintained for employees.
 Entry and exit protocols are in place to manage exposure likelihood to/from the abattoir.
- □ A risk assessment is undertaken of personnel roles for spread of ASF virus.
 - □ Exit protocols are in place to manage exposure likelihood from the abattoir for roles assessed as medium or high risk.
- □ A risk assessment process for drivers is in place to establish susceptible animal contact outside the abattoir facility.
 - □ Entry and exit protocols are in place to manage exposure likelihood to/from the abattoir.

Vehicles

- □ Site entry is restricted to authorised vehicles only.
- □ A system for vehicle compliance with approved internal transit routes is in place and monitored.
- A system for vehicle compliance with abattoir zones is in place and monitored.
- □ Vehicle scheduling systems and vehicle compliance with schedules are in place and monitored.
- □ A system is in place to enable and monitor pig trucks, other vehicles and drivers that access transition and dirty zones for:
 - $\hfill\square$ permit compliance when relevant
 - □ vehicle pre-assessment to ensure suitability for decontamination
 - □ pig receival processes to ensure no driver has access to the lairage this may include consideration of abattoir employees rather than drivers unloading pigs
 - □ compliance with onsite vehicle decontamination (or at an audited offsite equivalent facility before the next on-farm pickup), including of vehicle cabins this may include consideration of abattoir employees rather than drivers washing and disinfecting vehicles
 - □ driver compliance with showering onsite before exiting (or at an audited offsite equivalent before the next on-farm pickup) when the driver has unloaded pigs or washed or decontaminated their vehicle
 - □ vehicle inspection points and inspection processes.

Live pigs

- Advance notice and pre-approvals are required for all pig deliveries.
- □ Incoming pigs are only accepted under a valid movement permit.
- Deliveries are supervised by the abattoir.
- □ Through-chain mob-based pig identification is performed by an appropriate identifier as per jurisdictional legislation. This may include the use of shoulder tattoo brands to assist with traceability during a response.
- □ There is capacity to segregate suspect pigs from direct contact with other pigs in lairage.
- □ Antemortem and postmortem inspections are undertaken by an authorised veterinarian.
- □ Reporting and testing of suspect pigs are undertaken by a veterinarian or other authorised person.
- □ Contingency plans are in place for:
 - □ pigs in lairage from an IP, dangerous contact premises (DCP) or suspect premises (SP)

- □ pigs in transit from an IP, DCP or SP
- □ pigs in lairage or transit from other premises classifications (trace premises, at-risk premises, premises of relevance)
- □ pigs in transit from other jurisdictions
- □ pigs scheduled for processing within the first 24–48 h of an outbreak impacting an abattoir, but not yet loaded out
- D pigs scheduled for processing after the first 48 h of an outbreak impacting an abattoir.
- □ Animal welfare considerations are addressed.

Other species in accordance with Australian Standard AS 4696:2023

- □ Insect, vermin and bird controls are in place.
- Domestic, feral and wild animals are excluded.

Decontamination plans

- Decontamination plans are in place for:
 - 🛛 lairage
 - □ unloading
 - \Box road(s)
 - □ abattoir and equipment
 - □ personnel.
- □ Chemical application plans, including chemical concentration and use methodology, are in place by area of abattoir.
- □ Provisions are made for chemical supply.

Contaminated product

- □ Plans are in place for identification of contaminated product.
- □ There is a disposal plan for contaminated product.
- □ Risk assessment, tracing and, when necessary, management protocols are in place for outgoings including:
 - \Box edible product
 - \Box inedible product
 - $\hfill\square$ solid and liquid wastes
 - \Box laundry.

Management and traceability of outgoings

- □ Post-abattoir edible and inedible material management and traceability processes are in place.
- □ Solid and liquid abattoir waste protocols and traceability are in place when used onward.
- □ Laundry management and traceability are in place.
- □ Effluent and wastewater systems are managed to prevent exposure of susceptible animals to the ASF virus and reduce the likelihood of ASF spread by manure, bedding and feed.

Post-processing facilities

□ Post-processing facilities are classified as an APF or equivalent (eg rendering abattoir or other post-abattoir affiliated facility).

End-of-process daily reporting capabilities

- □ End-of-process daily reporting is in place for:
 - $\hfill\square$ outcomes for animals delivered

- □ reconciliation of consignments against movement permits (pig receivals to close out permit processes)
- □ movements of outgoing inedible and edible product
- □ outgoing solid, liquid and consumable wastes, and laundry.

Pre-operation assessment

- □ Property inspection, verification of decontamination and resolution of IP and DCPF classifications are undertaken by a government inspector or delegate.
- □ Property inspection, verification of processes and classification as an APF are undertaken by a government inspector.
- □ Review, oversight and monitoring processes are in place while the abattoir is functioning as an APF, with verification by an approved person to maintain the APF classification.

Communications

- □ A robust interface between the abattoir, local control centre (LCC) and state coordination centre (SCC) is operating.
- □ Systems to deliver and verify biosecurity controls are in place and personnel are aware of their responsibilities.
- □ Daily debriefs are implemented.
- □ Adequate and competent industry liaison is in place.
- □ Abattoir personnel are informed and aware.

Human resourcing

- □ Sufficient, competent and authorised personnel are allocated by the abattoir to support site verification and premises classification by the responding jurisdiction.
- □ Sufficient, competent and authorised personnel are in place to liaise with LCC and SCC.
- □ Employee training and awareness of biosecurity controls and their associated responsibilities are in place.

Scheduling systems to support biosecure function

- □ To support operation of a biosecure facility, scheduling systems are in place for the following:
 - □ pigs and pig trucks
 - □ employees (eg an A team and B team)
 - □ cleaning
 - □ waste disposal
 - □ laundry
 - delegated roles and responsibilities for a response
 - \Box other.

Considerations and limiting factors for abattoirs assisting depopulation of pigs from contaminated premises

- □ Capacity for rapid resolution back to an APF
- □ Capacity for a scaled-down, destruction-only second shift, followed by clean-down, resolution of contamination and establishment of an APF
- □ Proximity to other operations where susceptible animals are housed or handled
- □ Proximity to premises to be depopulated
- \Box Proximity to the disposal site
- □ Capacity for nonreversible stunning (without sticking or captive bolt)

- Verification and approval of a nonreversible stunning method for application during a response
- □ Veterinary oversight of pig welfare and the depopulation process
- □ Capacity to accommodate, handle and destroy pigs of the sizes requiring depopulation
- □ Capacity to modify infrastructure to divert pigs from the stunning point directly to disposal vehicles
- □ Capacity to exclude access to the abattoir chain beyond the stunning point
- □ Logistical capacity to condemn, transport and dispose of all dead pigs, including transport conditions, route of travel and disposal site
- □ Minimum personnel onsite and appropriate risk-assessed decontamination protocols on exit and re-entry
- □ Capacity to undertake vehicle decontamination including inside the truck cab, and for drivers to shower before exiting
- □ Minimum pig time in lairage (if possible, pigs are ran directly off the truck)
- □ Capability of rapid turnaround decontamination of used and contaminated areas only (ie not the entire abattoir)
- □ Choice and supply of appropriate chemicals for rapid and effective resolution
- □ Property inspection, verification of decontamination, resolution and renewal of an APF premises classification by a government inspector (potentially an on-plant veterinarian).

Appendix 4: Recommendations for pig transport decontamination facilities vehicles and drivers

Objective

To provide guidance to government and industry stakeholders to assist operationalisation of biosecurity controls involving transport decontamination.

Definitions

- **Cleaning** the physical removal, using water, of unwanted substances such as manure, dirt, bedding and other gross contamination from vehicle surfaces and equipment. Soap and/or degreaser can assist cleaning.
- **Decontamination** includes all stages of cleaning and disinfection.
- **Disinfection** the application, after cleaning, of chemicals to kill bacteria, viruses or parasitic agents on vehicle surfaces and equipment. Disinfection does not necessarily clean dirty surfaces or remove contamination. The effectiveness of disinfectants is reduced by manure, dirt, bedding and other organic matter. Disinfectant should only be used on vehicle surfaces and equipment after they have been cleaned.

Recommendations

Water and chemical quality

- 1. Ensure water for cleaning and disinfection does not contain biological or chemical contaminants that may contaminate vehicles or reduce the effectiveness of soaps, detergents, degreasers or disinfectants.
- 2. Foam-based cleaning and disinfection chemicals adhere to surfaces and create collapsing bubbles of fresh chemical on vehicle surfaces. This lengthens chemical application time and efficacy. The 'creeping' capacity of foam also improves access to difficult-to-reach places such as cracks and crevices. Foams also help the operator to see which surfaces have been covered. Choose chemicals that are approved for use, target African swine fever (ASF) virus, have good surfactants, and that keep collapsing bubbles on vehicle surfaces for sufficient time (as prescribed by the manufacturer). Ensure chemicals are nonreactive with vehicle paint or are used in a manner that avoids damage.

Control of wastewater

1. Ensure wastewater from the wash facility is contained and managed to prevent the exposure of susceptible animals to the disease-causing agent and reduce the likelihood of disease spread by contaminated water. Consultation with jurisdictional environmental regulators is recommended.

Before entry

- 1. Observe traffic flow requirements into and out of the truck wash facility to avoid crossover of clean and dirty vehicles.
- 2. Ensure the washing bay is clean before entering.

Truck cab

- 1. Clean the inside of the truck cab using a clean, wet cloth. Ensure the floor and pedals of the cab are clean.
- 2. Apply an approved, safe disinfectant to internal cab surfaces.
- 3. Apply an effective insecticide inside the cab to kill insects if required.
- 4. Dispose of contaminated items according to site's standard operating procedure.

Driver clothing and footwear on entry

- 1. After cleaning the inside of the truck cab, exit the vehicle and follow the designated entry pathway to the driver change facilities.
- 2. Once inside the change facilities, remove own footwear and decontaminate using the change facilities provided.
- 3. Remove own outerwear and dress in truck wash facility protective outerwear and footwear.
- 4. Exit the change facilities and follow the designated pathway to the truck wash.

Cleaning

- 1. For gross cleaning, scrape and/or sweep manure, dirt, bedding and other material from the exterior of the truck and trailer, followed by the interior and any equipment if there is buildup of organic matter that cannot be rinsed off. Work from top to bottom, front to back to avoid cross-contamination.
- 2. Lift floor panels, crates, and equipment carried under the vehicle body (eg spare tyres) if they are removable or can be detached for cleaning.
- 3. Thoroughly rinse the interior of the pig trailer and any equipment to remove remaining manure, dirt, bedding and other material. Do this with low-pressure, high-volume water.
- 4. Check exterior and interior surfaces to ensure they are visibly clean.
- 5. Soak interior surfaces of the trailer and equipment with detergent, working from bottom to top, back to front.
- 6. Soak exterior surfaces of the truck and trailer with detergent. Ensure wheel arches, wheel trims, flares, step treads, bumpers, mud flaps and tyres are soaked.
- 7. Do not let detergent dry on any surface. In warmer weather, this may mean applying detergent to the vehicle in sections.
- 8. Working from top to bottom, front to back, wash off the soap/soaked matter from the exterior of the truck and trailer, then the interior of the trailer and any equipment. Use additional water pressure as required to remove observable contamination.
- 9. Allow the vehicle to drain before disinfecting, to prevent water accumulation and dilution of disinfectant.
- 10. Check exterior and interior surfaces to ensure they are visibly clean and that there are no accumulations of water.

Disinfection

- 1. Disinfectants may be highly toxic. Read all label and safety instructions before use.
- 2. Only use disinfectant on trucks and trailers after they have been cleaned.
- 3. Use only disinfectants approved by the Australian Pesticides and Veterinary Medicines Authority (APVMA) for use against the specific emergency animal disease (EAD) of concern (in this case, ASF virus).
- 4. Apply disinfectant at the correct concentration.
- 5. Thoroughly wet all exterior surfaces of the truck and trailer, then the interior of the pig trailer and equipment.
- 6. Rinse and disinfect the truck bay floor, including the floor to the vehicle cab door, to define a 'designated clean pathway' to prevent cab contamination when returning to the truck to exit.

7. Allow the required contact time for the disinfectant to elapse. To determine the required contact time, refer to the product's label, APVMA permit for the specific EAD of concern, and **AUSVETPLAN's** *Operational procedures manual: Decontamination*.

After washing

- 1. Visually inspect the external and internal surfaces of the truck, trailer and equipment.
- 2. Rinse the floor of the wash bay area.

Driver clothing and footwear on exit

- 1. Exit the truck wash bay and follow the designated entry pathway to the driver change facilities.
- 2. Remove facility footwear and clean and disinfect.
- 3. Enter the driver change facilities and remove facility outerwear. Place it in the designated spot in the dirty side of the change facility.
- 4. Shower, exit to the clean side of the change facility and dress in own clothing and footwear.

Drying

- 1. Most vehicles air dry with adequate driving time, temperature, sunlight, and if parked on a slope to allow residual water to drain.
- 2. In some situations, forced air drying using fans and/or heat may be necessary.

Clean vehicles

- 1. Observe traffic flow requirements when exiting the truck wash facility to avoid crossover with dirty vehicles.
- 2. Before the next entry to a farm premises, do not park near:
 - a. dirty vehicles
 - b. vehicles carrying susceptible animals
 - c. or at locations accessible to susceptible animals, or where susceptible animals are housed or handled.

Glossary

Document-specific terms

Term	Definition
Cleaning	The physical removal, using water, of unwanted substances such as manure, dirt, bedding and other gross contamination from vehicle surfaces and equipment. Soap and/or degreaser can assist cleaning.
Decontamination	All stages of cleaning and disinfection.
Disinfection	The application, after cleaning, of chemicals to kill bacteria, viruses or parasitic agents on vehicle surfaces and equipment. Disinfection does not necessarily clean dirty surfaces or remove contamination. The effectiveness of disinfectants is reduced by manure, dirt, bedding and other organic matter. Disinfectant should only be used on vehicle surfaces and equipment after they have been cleaned.

Standard AUSVETPLAN terms

Term	Definition
Animal byproducts	Products of animal origin that are not for consumption but are destined for industrial use (eg hides and skins, fur, wool, hair, feathers, hooves, bones, fertiliser).
Animal Health Committee	A committee whose members are the chief veterinary officers of the Commonwealth, states and territories, along with representatives from the CSIRO Australian Centre for Disease Preparedness (CSIRO-ACDP) and the Australian Government Department of Agriculture, Fisheries and Forestry. There are also observers from Animal Health Australia, Wildlife Health Australia, and the New Zealand Ministry for Primary Industries. The committee provides advice to the National Biosecurity Committee on animal health matters, focusing on technical issues and regulatory policy. <i>See also</i> National Biosecurity Committee
Animal products	Meat, meat products and other products of animal origin (eg eggs, milk) for human consumption or for use in animal feed.
Approved disposal site (ADS)	A premises that has zero susceptible species and that has been approved as a disposal site for animal carcasses, or potentially contaminated animal products, wastes or things.
Approved processing facility (APF)	An abattoir, knackery, milk processing plant or other such facility that maintains increased biosecurity standards. Such a facility could have animals or animal products introduced from lower-risk premises under a permit for processing to an approved standard.
Assessed negative (AN)	A qualifier that may be applied to at-risk premises, premises of relevance and premises previously defined as suspect premises, trace premises, dangerous contact premises or dangerous contact processing facilities that have undergone an epidemiological and/or laboratory assessment and have been cleared of suspicion at the time of classification, and can progress to another status.

Term	Definition	
At-risk premises (ARP)	A premises in a restricted area that contains a live susceptible animal(s) but is not considered at the time of classification to be an infected premises, dangerous contact premises, dangerous contact processing facility, suspect premises or trace premises. <i>See also</i> Restricted area.	
Australian Chief Veterinary Officer	The nominated senior veterinarian in the Australian Government Department of Agriculture, Fisheries and Forestry who manages international animal health commitments and the Australian Government's response to an animal disease outbreak. <i>See also</i> Chief veterinary officer	
AUSVETPLAN	Australian Veterinary Emergency Plan. A series of technical response plans that describe the proposed Australian approach to an emergency animal disease incident. The documents provide guidance based on sound analysis, linking policy, strategies, implementation, coordination and emergency-management plans.	
Carcase	The body of an animal slaughtered for food.	
Carcass	The body of an animal that died in the field.	
Chief veterinary officer (CVO)	The senior veterinarian of the animal health authority in each jurisdiction (national, state or territory) who has responsibility for animal disease control in that jurisdiction. <i>See also</i> Australian Chief Veterinary Officer	
Compartmentalisation	The process of defining, implementing and maintaining one or more disease-free establishments under a common biosecurity management system in accordance with World Organisation for Animal Health (WOAH) guidelines, based on applied biosecurity measures and surveillance, to facilitate disease control and/or trade.	
Compensation	The sum of money paid by government to an owner for livestock or property that are destroyed for the purpose of eradication or prevention of the spread of an emergency animal disease, and livestock that have died of the emergency animal disease. <i>See also</i> Cost-sharing arrangements, Emergency Animal Disease Response Agreement	
Consultative Committee on Emergency Animal Diseases (CCEAD)	The key technical coordinating body for animal health emergencies. Members are state and territory chief veterinary officers, representatives of CSIRO-ACDP and the relevant industries, and the Australian Chief Veterinary Officer as chair.	
Control area (CA)	A legally declared area that acts as a disease-free buffer ¹⁰ between the restricted area and the outside area (the limits of a control area and the conditions applying to it can be varied during an incident according to need) where the disease controls and movement controls applied are of lesser intensity than those in a restricted area.	

¹⁰ The use of the term 'disease free' implies that disease is not known to occur within the geographic area described by the CA.

Term	Definition
Cost-sharing arrangements	Arrangements agreed between governments (national, states and territories) and livestock industries for sharing the costs of emergency animal disease responses. <i>See also</i> Compensation, Emergency Animal Disease Response Agreement
Dangerous contact animal	A susceptible animal that has been designated as being exposed to other infected animals or potentially infectious products following tracing and epidemiological investigation.
Dangerous contact premises (DCP)	A premises, apart from an abattoir, knackery or milk processing plant (or other such facility) that, after investigation and based on a risk assessment, is considered to contain a susceptible animal(s) not showing clinical signs, but considered highly likely to contain an infected animal(s) and/or contaminated animal products, wastes or things that present an unacceptable risk to the response if the risk is not addressed, and that therefore requires action to address the risk.
Dangerous contact processing facility (DCPF)	An abattoir, knackery, milk processing plant or other such facility that, based on a risk assessment, appears highly likely to have received infected animals, or contaminated animal products, wastes or things, and that requires action to address the risk.
Declared area	A defined tract of land that is subjected to disease control restrictions under emergency animal disease legislation. There are two types of declared areas: restricted area and control area.
Decontamination	Includes all stages of cleaning and disinfection.
Depopulation	The removal of a host population from a specified area to control or prevent the spread of disease.
Destroy (animals)	To kill animals humanely.
Disease agent	A general term for a transmissible organism or other factor that causes an infectious disease.
Disinfectant	A chemical used to destroy disease agents outside a living animal.
Disinfection	The application, after thorough cleansing, of procedures intended to destroy the infectious or parasitic agents of animal diseases, including zoonoses; applies to premises, vehicles and different objects that may have been directly or indirectly contaminated.
Disinsection	The destruction of insect pests, usually with a chemical agent.
Disposal	Sanitary removal of animal carcasses, animal products, materials and wastes by burial, burning or some other process so as to prevent the spread of disease.
Emergency animal disease	A disease that is (a) exotic to Australia or (b) a variant of an endemic disease or (c) a serious infectious disease of unknown or uncertain cause or (d) a severe outbreak of a known endemic disease, and that is considered to be of national significance with serious social or trade implications. <i>See also</i> Endemic animal disease, Exotic animal disease
Emergency Animal Disease Hotline	24-hour freecall service for reporting suspected incidences of exotic diseases — 1800 675 888.

Term	Definition
Emergency Animal Disease Response Agreement	Agreement between the Australian, state and territory governments and livestock industries on the management of emergency animal disease responses. Provisions include participatory decision making, risk management, cost sharing, the use of appropriately trained personnel and existing standards such as AUSVETPLAN. <i>See also</i> Compensation, Cost-sharing arrangements
Endemic animal disease	A disease affecting animals (which may include humans) that is known to occur in Australia. <i>See also</i> Emergency animal disease, Exotic animal disease
Enterprise	See Risk enterprise
Enzyme-linked immunosorbent assay (ELISA)	A serological test designed to detect and measure the presence of antibody or antigen in a sample. The test uses an enzyme reaction with a substrate to produce a colour change when antigen–antibody binding occurs.
Epidemiological investigation	An investigation to identify and qualify the risk factors associated with the disease. See also Veterinary investigation
Epidemiological unit	In the context of infectious disease, an epidemiological unit is a unit which shares the same likelihood of exposure to a pathogen. ¹¹ For the purposes of AUSVETPLAN premises classifications, an epidemiological unit can be defined as a discrete area encompassing all, or part, of a premises, within which control measures can be applied to achieve disease control outcomes.
Epidemiology	The study of disease in populations and of factors that determine its occurrence.
Exotic animal disease	A disease affecting animals (which may include humans) that does not normally occur in Australia. <i>See also</i> Emergency animal disease, Endemic animal disease
Exotic fauna/feral animals	See Wild animals
Feeding prohibited pig feed	Also known as 'swill feeding', it includes:
	 feeding, or allowing or directing another person to feed, prohibited pig feed to a pig allowing a pig to have access to prohibited pig feed the collection and storage or possession of prohibited pig feed on a premises where one or more pigs are kept supplying to another person prohibited pig feed that the supplier knows is for feeding to any pig. This definition was endorsed by the Agriculture Ministers' Council through AGMIN OOS 04/2014.

¹¹ www.woah.org/fileadmin/Home/eng/Health_standards/tahc/2018/en_glossaire.htm#terme_unite_epidemiologique

Term	Definition
Fomites	Inanimate objects (eg boots, clothing, equipment, instruments, vehicles, crates, packaging) that can carry an infectious disease agent and may spread the disease through mechanical transmission.
General permit	A legal document that describes the requirements for movement of an animal (or group of animals), commodity or thing, for which permission may be granted without the need for direct interaction between the person moving the animal(s), commodity or thing and a government veterinarian or inspector. The permit may be completed via a webpage or in an approved place (such as a government office or commercial premises). A printed version of the permit must accompany the movement. The permit may impose preconditions and/or restrictions on movements. <i>See also</i> Special permit
In-contact animals	Animals that have had close contact with infected animals, such as noninfected animals in the same group as infected animals.
Incubation period	The period that elapses between the introduction of the pathogen into the animal and the first clinical signs of the disease.
Index case	The first case of the disease to be diagnosed in a disease outbreak. <i>See also</i> Index property
Index property	The property on which the index case is found. <i>See also</i> Index case
Infected area (IA)	An area on which wild/feral animals meeting the case definition are or were present, or the causative agent of the emergency animal disease is present, or there is a reasonable suspicion that either is present, and that the relevant chief veterinary officer or their delegate has determined to be an infected area. The area may be subject to wild/feral animal disease controls, including, as necessary, destruction, disposal and decontamination activities, vaccination, intense surveillance and movement controls.
Infected premises (IP)	A premises on which animals meeting the case definition are or the causative agent of the emergency animal disease is present, or there is a reasonable suspicion that either is present, and that the relevant chief veterinary officer or their delegate has declared to be an infected premises.
Local control centre (LCC)	An emergency operations centre responsible for the command and control of field operations in a defined area.
Monitoring	Routine collection of data for assessing the health status of a population or the level of contamination of a site for remediation purposes. <i>See also</i> Surveillance
Movement control	Restrictions placed on the movement of animals, people and other things to prevent the spread of disease.
National Biosecurity Committee (NBC)	A committee that was formally established under the Intergovernmental Agreement on Biosecurity (IGAB). The IGAB was signed on 13 January 2012, and signatories include all states and territories except Tasmania. The committee provides advice to the Agriculture Senior Officials

Term	Definition
	Committee and the Agriculture Ministers' Forum on national biosecurity issues, and on the IGAB.
National management group (NMG)	A group established to approve (or not approve) the invoking of cost sharing under the Emergency Animal Disease Response Agreement. NMG members are the Secretary of the Australian Government Department of Agriculture, Fisheries and Forestry as chair, the chief executive officers of the state and territory government parties, and the president (or analogous officer) of each of the relevant industry parties.
Native wildlife	See Wild animals
Operational procedures	Detailed instructions for carrying out specific disease control activities, such as disposal, destruction, decontamination and valuation.
Outside area (OA)	The area of Australia outside the restricted and control areas.
Owner	Person responsible for a premises (includes an agent of the owner, such as a manager or other controlling officer).
Polymerase chain reaction (PCR)	A method of amplifying and analysing DNA sequences that can be used to detect the presence of viral DNA.
Premises	A geographically defined tract of land including its buildings. A premises may be represented geospatially (eg on maps) as a polygon for whole or parts of a property, or as a centroid to identify the entire property. A premises may be part of, or an entire property.
	Premises with a case number are assigned a premises classification for disease control management and monitoring purposes. As such, a premises is an 'epidemiological unit' for disease control purposes. A premises can also be a separate epidemiological unit internal of a land parcel in some circumstances.
	On an exceptional basis and subject to a risk assessment, a property may be divided into multiple, discrete biosecure epidemiological units. These units may then be reclassified as separate premises for disease control purposes.
	An epidemiological unit may define the extent of the premises.
Premises of relevance (POR)	A premises in a control area that contains one or more live susceptible animals but is not considered at the time of classification to be an infected premises, dangerous contact premises, dangerous contact processing facility, suspect premises or trace premises.
Premises with susceptible species (PSS)	A premises in the outside area that contains one or more live susceptible animals or other units of interest, but is not considered at the time of classification to be an infected premises, dangerous contact premises, dangerous contact processing facility, suspect premises or trace premises.
Prevalence	The proportion (or percentage) of animals in a particular population affected by a particular disease (or infection or positive antibody titre) at a given point in time.
Prohibited pig feed	Also referred to as 'swill'.

Term	Definition
	Material of mammalian origin, or any substance that has come in contact with this material, but does not include:
	(i) milk, milk products or milk byproducts either of Australian provenance or legally imported for stockfeed use into Australia
	(ii) material containing flesh, bones, blood, offal or mammal carcases that has been treated by an approved process ¹
	(iii) a carcass or part of a domestic pig, born and raised on the property on which the pig or pigs that are administered the part are held, that is administered for therapeutic purposes in accordance with the written instructions of a veterinary practitioner
	(iv) material used under an individual and defined-period permit issued by a jurisdiction for the purposes of research or baiting.
	¹ In terms of (ii), approved processes are:
	1. rendering in accordance with the Australian Standard for the Hygienic Rendering of Animal Products
	2. under jurisdictional permit, cooking processes subject to compliance verification that ensure that a core temperature of at least 100 °C for a minimum of 30 minutes, or equivalent, has been reached
	3. treatment of cooking oil, which has been used for cooking in Australia, in accordance with the National Standard for Recycling of Used Cooking Fats and Oils intended for Animal Feeds
	4. under jurisdictional permit, any other nationally agreed process approved by the Animal Health Committee for which an acceptable risk assessment has been undertaken and that is subject to compliance verification.
	The national definition is a minimum standard. Some jurisdictions have additional conditions for feeding of prohibited pig feed that pig producers in those jurisdictions must comply with, over and above the requirements of the national definition.
Qualifiers	
— assessed negative	Assessed negative (AN) is a qualifier that may be applied to premises previously defined as SPs, TPs, DCPs or DCPFs. The qualifier may be applied following surveillance, epidemiological investigation, and/or laboratory assessment/diagnostic testing, and indicates that the premises is assessed as negative at the time of classification.
— sentinels on site	Sentinels on site (SN) is a qualifier that may be applied to IPs and DCPs to indicate that sentinel animals are present on the premises as part of response activities (ie before it can be assessed as an RP).
— vaccinated	The vaccinated (VN) qualifier can be applied in a number of different ways. At its most basic level, it can be used to identify premises that contain susceptible animals that have been vaccinated against the EAD in question. However, depending on the legislation, objectives and processes within a jurisdiction, the VN qualifier may be used to track a range of criteria and parameters.
Quarantine	Legal restrictions imposed on a place or a tract of land by the serving of a notice limiting access or egress of specified animals, persons or things.

Term	Definition
Resolved premises (RP)	An infected premises, dangerous contact premises or dangerous contact processing facility that has completed the required control measures and is subject to the procedures and restrictions appropriate to the area in which it is located.
Restricted area (RA)	A relatively small legally declared area around infected premises and dangerous contact premises that is subject to strict disease controls and intense surveillance. The limits of a restricted area and the conditions applying to it can be varied during an incident according to need.
Risk enterprise	A defined livestock or related enterprise that is potentially a major source of infection for many other premises. Includes intensive piggeries, feedlots, abattoirs, knackeries, saleyards, calf scales, milk factories, tanneries, skin sheds, game meat establishments, cold stores, artificial insemination centres, veterinary laboratories and hospitals, road and rail freight depots, showgrounds, field days, weighbridges and garbage depots.
Sensitivity	The proportion of truly positive units that are correctly identified as positive by a test. <i>See also</i> Specificity
Sentinel animal	Animal of known health status that is monitored to detect the presence of a specific disease agent.
Sentinels on site (SN)	A qualifier that may be applied to infected premises to indicate that sentinel animals are present on the premises as part of response activities.
Seroconversion	The appearance in the blood serum of antibodies (as determined by a serology test) following vaccination or natural exposure to a disease agent.
Serosurveillance	Surveillance of an animal population by testing serum samples for the presence of antibodies to disease agents.
Serotype	A subgroup of microorganisms identified by the antigens carried (as determined by a serology test).
Serum neutralisation test	A serological test to detect and measure the presence of antibody in a sample. Antibody in serum is serially diluted to detect the highest dilution that neutralises a standard amount of antigen. The neutralising antibody titre is given as the reciprocal of this dilution.
Slaughter	The humane killing of an animal for meat for human consumption.
Special permit	A legal document that describes the requirements for movement of an animal (or group of animals), commodity or thing, for which the person moving the animal(s), commodity or thing must obtain prior written permission from the relevant government veterinarian or inspector. A printed version of the permit must accompany the movement. The permit may impose preconditions and/or restrictions on movements. <i>See also</i> General permit
Specificity	The proportion of truly negative units that are correctly identified as negative by a test. See also Sensitivity

Term	Definition
Stamping out	The strategy of eliminating infection from premises through the destruction of animals in accordance with the particular AUSVETPLAN manual, and in a manner that permits appropriate disposal of carcasses and decontamination of the site.
State coordination centre (SCC)	The emergency operations centre that directs the disease control operations to be undertaken in that state or territory.
Surveillance	A systematic program of investigation designed to establish the presence, extent or absence of a disease, or of infection or contamination with the causative organism. It includes the examination of animals for clinical signs, antibodies or the causative organism.
Susceptible animals	Animals that can be infected with a particular disease.
Surveillance area	A geographically defined area in which animals are subject to intensive surveillance for the purposes of early detection of, or proof of freedom from EADs, It may or may not be legally declared, and may be used for disease control purposes in some jurisdictions.
Suspect animal	An animal that may have been exposed to an emergency disease such that its quarantine and intensive surveillance, but not pre-emptive slaughter, is warranted. <i>or</i> An animal not known to have been exposed to a disease agent but
	showing clinical signs requiring differential diagnosis.
Suspect premises (SP)	Temporary classification of a premises that contains a susceptible animal(s) not known to have been exposed to the disease agent but showing clinical signs similar to the case definition, and that therefore requires investigation(s).
Swill	See Prohibited pig feed
Swill feeding	See Feeding prohibited pig feed
Trace premises (TP)	Interim classification of a premises that tracing indicates may have susceptible animals that have been exposed to the disease agent, or contains potentially contaminated animal products, wastes or things, and that requires investigation.
Tracing	The process of locating animals, persons or other items that may be implicated in the spread of disease, so that appropriate action can be taken.
Transmission area (TA)	An area, not usually legally declared, that is used for vectorborne diseases for epidemiological purposes, recognising that vectors are not confined by property boundaries.
Unclassified processing facility (UPF)	An abattoir, knackery, milk or egg processing plant or other such facility where the current presence of susceptible animals and/or risk products, wastes or things is unknown.
Units of interest	Units of interest may require classification commensurate with the needs of a response and may include:

Term	Definition
	 transporters and, transport depots where trucks carrying potentially infected stock and animal products are stored, or through which livestock may transiently move milk tankers veterinarians, and other personnel of specific interest that move between properties.
Unknown status premises (UP)	A premises where the current presence of susceptible animals and/or risk products, wastes or things is unknown.
Vaccination	Inoculation of individuals with a vaccine to provide active immunity.
Vaccine	A substance used to stimulate immunity against one or several disease- causing agents to provide protection or to reduce the effects of the disease. A vaccine is prepared from the causative agent of a disease, its products or a synthetic substitute, which is treated to act as an antigen without inducing the disease.
— adjuvanted	A vaccine in which one or several disease-causing agents are combined with an adjuvant (a substance that increases the immune response).
— attenuated	A vaccine prepared from infective or 'live' microbes that are less pathogenic but retain their ability to induce protective immunity.
— gene deleted	An attenuated or inactivated vaccine in which genes for non-essential surface glycoproteins have been removed by genetic engineering. This provides a useful immunological marker for the vaccine virus compared with the wild virus.
— inactivated	A vaccine prepared from a virus that has been inactivated ('killed') by chemical or physical treatment.
— recombinant	A vaccine produced from a virus that has been genetically engineered to contain only selected genes, including those causing the immunogenic effect.
Vaccinated (VN)	A qualifier that may be used to identify premises that contain susceptible animals that have been vaccinated against the emergency animal disease in question.
Vaccination area	A geographically defined area in which emergency vaccination is applied for the purpose of EAD control. It may or may not be legally declared, and may be used for disease control purposes in some jurisdictions.
Vector	A living organism (frequently an arthropod) that transmits an infectious agent from one host to another. A <i>biological</i> vector is one in which the infectious agent must develop or multiply before becoming infective to a recipient host. A <i>mechanical</i> vector is one that transmits an infectious agent from one host to another but is not essential to the life cycle of the agent.
Veterinary investigation	An investigation of the diagnosis, pathology and epidemiology of the disease. See also Epidemiological investigation
Viraemia	The presence of viruses in the blood.
Wild animals	

Term	Definition
— native wildlife	Animals that are indigenous to Australia and may be susceptible to emergency animal diseases (eg bats, dingoes, marsupials).
— feral animals	Animals of domestic species that are not confined or under control (eg cats, horses, pigs).
— exotic fauna	Nondomestic animal species that are not indigenous to Australia (eg foxes).
Wild animal management area	A geographically defined area in which wild animal management or control activities are conducted for the purpose of EAD control. It may or may not be legally declared, and may be used for disease control purposes in some jurisdictions.
WOAH Terrestrial Code	Describes standards for safe international trade in animals and animal products. Revised annually and published on the internet at: <u>www.woah.org/en/what-we-do/standards/codes-and-</u> <u>manuals/terrestrial-code-online-access</u> .
WOAH Terrestrial Manual	WOAH Manual of diagnostic tests and vaccines for terrestrial animals. Describes standards for laboratory diagnostic tests, and the production and control of biological products (principally vaccines). The current edition is published on the internet at: <u>www.woah.org/en/what-we-</u> <u>do/standards/codes-and-manuals/terrestrial-manual-online-access</u> .
Wool	Sheep wool.
Zero susceptible species premises (ZP)	A premises that does not contain any susceptible animals.
Zoning	The process of defining, implementing and maintaining a disease-free or infected area in accordance with WOAH guidelines, based on geopolitical and/or physical boundaries and surveillance, to facilitate disease control and/or trade.
Zoonosis	A disease of animals that can be transmitted to humans.

Abbreviations

Document-specific abbreviations/acronyms

Abbreviation/acronym	Full title
DAWE	Department of Agriculture, Water and the Environment (superseded by the Department of Agriculture, Fisheries and Forestry)
GAP	good agricultural practices
GMP	good manufacturing practice
НАССР	hazard analysis critical control point
NASOP	nationally agreed standard operating procedure
OPV	on-plant veterinarian

Standard AUSVETPLAN abbreviations/acronyms

Abbreviation/acronym	Full title
ACDP	Australian Centre for Disease Preparedness
ADS	approved disposal site
AN	assessed negative
APF	approved processing facility
ARP	at-risk premises
AUSVETPLAN	Australian Veterinary Emergency Plan
CA	control area
CCEAD	Consultative Committee on Emergency Animal Diseases
CSIRO	Commonwealth Scientific and Industrial Research Organisation
CVO	chief veterinary officer
DCP	dangerous contact premises
DCPF	dangerous contact processing facility
EAD	emergency animal disease
EADRA	Emergency Animal Disease Response Agreement
EADRP	Emergency Animal Disease Response Plan
EDTA	ethylenediaminetetraacetic acid (anticoagulant for whole blood)
ELISA	enzyme-linked immunosorbent assay
GP	general permit
IETS	International Embryo Transfer Society

Abbreviation/acronym	Full title
IP	infected premises
LCC	local control centre
NASOP	nationally agreed standard operating procedure
NMG	National Management Group
OA	outside area
PCR	polymerase chain reaction
POR	premises of relevance
PSS	premises of susceptible species
RA	restricted area
RP	resolved premises
SCC	state coordination centre
SP	suspect premises
SpP	special permit
ТА	transmission area
ТР	trace premises
UP	unknown status premises
UPF	unclassified processing facility
VN	vaccinated
WOAH	World Organisation for Animal Health
ZP	zero susceptible species premises

References

Slatyer R, Hafi A, Richards K, Cozens M, Addai D, Cao L, Mornement C, Keighley M & Arthur T (2023). *Potential economic consequences of African swine fever in Australia*, ABARES research report 23.07, Canberra.