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**Export Meat Operational Guideline**

# 3.7 Pest control

**Purpose**

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Departmental logo
Australian Government Department of Agriculture, Fisheries and Forestry

The purpose of this guideline is to inform industry and department staff of the requirements around pest and vermin control procedures at export-registered establishments.

**Scope**

This guideline is applicable to all export meat establishments registered under the commodity Rules (meat, wild game, poultry, and rabbit).

**Legislative basis**

Under the *Export Control Act 2020*, and Export Control Rules 2021 (meat, wild game and poultry) there are legislative requirements relating to:

* an establishment to be approved for export registration
* compliance with the relevant Australian Standard for an arrangement to be approved (‘approved arrangement’).

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## Pest control standard operating procedures

The presence of pest and vermin in or around a meat processing facility is a potential human health risk and an indicator of poor sanitation. To minimise these hazards, the occupier must maintain current and approved procedures in their approved arrangement outlining the following:

* potential pest and vermin identification
* control of potential entry points for pest and vermin (doorways, windows, vents and chutes etc.)
* control of vermin in the interior of buildings
* control of vermin in the external surrounding environments
* control and appropriate use of pest control chemicals
* record keeping, monitoring and corrective action procedures.

### Interior control measures

The occupier must describe the control procedures undertaken in the interior areas of the establishment. This includes but is not limited to areas of the plant where edible and non-edible product is handled and stored, including amenities, carton and dry stores, canteens, and office areas.

Poisonous baits are not permitted for use in edible production areas of the plant, amenities, cartons stores and laundries.

Indicator bait programs should be used inside the establishment buildings to verify that control procedures are being effective in preventing pest and vermin entry. These baits should be monitored daily as part of the routine pre-operation hygiene check.

Types of indicator bait includes the following:

* sticky pads (if permitted under state and territory legislation)
* chew baits
* traps.

### External control measures

The occupier should utilise a combination of baiting, traps, physical barriers and maintenance procedures to control pest and vermin populations and minimise harbourage and entry into buildings. These may include the following:

* insecticutor devices or contained sticky catchers for flying insects
* self-closing external doorways with air curtains (air curtains should have a capacity to move air across the full extent of the doorway at 8 metres/sec)
* ante rooms which partition edible production areas from external entry/exit points
* screened entrances to inedible/condemned material processing areas
* positive pressure ventilation to provide an outward air flow barrier to flying insects (the ventilated input air must be filtered)
* a correctly fitted panel installed in the livestock race designed to prevent vermin access to the slaughter floor outside of production hours
* fitted plates (removable) on drain ports
* screened/flapped chutes leading from edible production areas to external or inedible areas (exhaust fans can also be fitted to chutes to ensure outward air movement).

### Cleaning and sanitation

The occupier’s approved cleaning and sanitation procedures are necessary to control and prevent pest and vermin harbourage within the establishment. Control and prevention procedures include but are not limited to:

* removal of food sources
* removal of standing water including within production areas and amenities
* cleaning the by-products facility and providing lidded and/or watertight containers/trailers for transport and removal
* prompt removal of inedible/condemned product
* monitoring and cleaning of soiled lairage pens and high traffic personnel thoroughfares during production
* providing accessible and effective boot washing facilities to prevent meat carriage outside
* routine inspection and cleaning of lockers
* storage of maintenance equipment in raised racks off the ground
* regular cleaning of amenities and dry stores.

Cleaning of hide receival and inedible production areas that lead directly from, or are adjacent to, the slaughter floor. This may include regular cleaning and removal of material within drains.

### Hazardous chemicals

Pesticide and insecticide chemicals are listed as hazardous chemicals and require a vendor declaration before use at export-registered meat establishments.

The storage and handling of hazardous chemicals used for pest management should not jeopardise the integrity and wholesomeness of edible products. There use should comply with the declaration of assurance and manufacturer’s instructions.

The [Export Meat Operational Guideline 3.13 Use of hazardous materials on-plant](#_Related_Material) provides guidance and details the requirements for the use of hazardous material in export-registered meat establishments.

### Insect control

The approved arrangement pest control procedures must be effective to control and reduce the biomass of flying and crawling insect populations. The procedures should involve denial of food sources, approved chemical treatments, minimising odours and sanitation measures.

#### External insect control

Insecticide spray application should be restricted to areas indicated on the site map and only as specified in the vendor declaration and manufacturer’s instructions.

Insecticide sprays that are fit-for-purpose in production areas can be used to control large flying insect populations. Insecticides may be sprayed onto the external wall surfaces and insect-screened areas during the warmer months. To prevent contamination, if sprays are used externally in the rendering plant or inedible/condemned material areas, no rendered or finished rendered product should be held in storage. Care must be taken to ensure insecticidal spray does not enter production areas, dry stores, amenities and not directed at thoroughfares used by edible-production operators or entrances to edible production areas.

A perimeter fly baiting regime can be established using fly-bait stations and fit‑for‑purpose fly bait. These bait stations should be constructed to prevent bird access.

The location of these stations should be recorded on the site map. The devices should be positioned as directed by manufacturer’s instructions or if not stated, as follows:

* positioned at least 50 metres from the plant and positioned to intercept flies moving to the plant from other areas
* elevated at a height of 2 to 3 metres from the ground and on the side of the plant facing the direction of the prevailing summer winds.

#### Internal insect control

Insecticutor devices or contained sticky catchers should be installed in locations within production areas that have external entry/exit points. However, placement must pose no contamination risk to edible product or materials used with edible product. Each device must be numbered, and locations recorded on a site map. These devices must be maintained as per the manufacturer’s recommendations to ensure efficacy and be routinely inspected and cleaned. Appropriate records must be maintained.

If insects breach control barriers and gain access to edible production, storage, or dry goods areas or amenities, the type of intervention will depend on the extent of the infestation and the structural features of the room. All corrective actions must be rapid and effective as insects pose a risk to food safety.

If an infestation is limited to a few individual insects the establishment should keep insects under surveillance and destroy them by swatting when possible or catching them in a portable vacuum. If any product or product contact surface is contaminated, ensure the contaminated area is trimmed and condemned or the product contact surfaces are cleaned, and dispose of any packing material.

If an infestation is extensive, then:

* the on-plant departmental officer must be informed
* a fit-or-purpose insecticide can be used as per the manufacturer’s directions after all product and packaging material is removed or covered to prevent contamination
* after the specified contact time with the insecticide, the area should be rinsed with potable water and product contact surfaces washed with detergent and rinsed before product or packaging material is reintroduced to the area.

### Vermin and larger vertebrate control

Vermin and larger vertebrate control measures should be targeted at the types described in the approved arrangement. The control measures should rely on a combination of methods including, but not limited to:

* physical barriers to deny access
* cleaning and sanitation programs
* chemical treatments using perimeter baiting
* indicator baits and traps to verify if vermin have breached the control measures and entered the premises.

Rodent control should comprise of secure rodenticidal baits in a perimeter baiting regime. These baits should meet all of the following requirements:

* be individually numbered
* have their location identified on the site map
* be secure and weatherproof
* be of a type that readily show signs of rodent activity and excludes access of non‑target species.

The occupier should monitor the buildings and surrounds for bird nesting sites.

Any potential nesting sites should be eliminated and if nests are observed, they should be promptly removed to prevent egg laying. Control measures should be initiated to prevent birds from returning.

Control of larger vertebrates should include the use of non-injury causing traps for the capture of feral or native animals that may pose a threat to hygiene and/or food safety. Feral animals should be humanely destroyed as soon as reasonably possible and native animal species should be relocated.

### Monitoring

The approved arrangement procedures are required to address monitoring and verification procedures. The procedure must detail the individuals responsible for the monitoring tasks, frequency they are undertaken and the records to be maintained. Operators and external pest control contractors/persons responsible for monitoring must be identified in the approved arrangement and appropriate training provided. Occupiers must be able to produce training records and/or external contractor certification documentation for audit purposes.

### Corrective action and verification

Immediate corrective action must be taken when pests are sighted or activity is detected. The establishment must perform all of the following actions:

* report the findings to the relevant supervisor/pest control officer and Quality Assurance Manager (QAM)
* initiate the approved corrective action and ensure edible product or materials are not contaminated
* notify the on-plant departmental officer of activity at indicator or perimeter baits to allow verification of corrective actions
* document findings and actions taken.

The corrective actions to be taken in response to monitoring procedures must be detailed in the approved arrangement. Any detection of pest and vermin activity in edible production and storage areas, dry goods stores and amenities require urgent review of the pest control program. Resultant corrective actions must be recorded.

As part of the establishment’s internal audit and management review, the QAM must regularly review the pest control verification records and approved procedures for effectiveness.

## External pest control contractors

External pest control providers may be contracted by the occupier. The occupier must ensure that:

* they hold and maintain a current and full pest control technician licence with the appropriate state or territory authority
* their responsibilities are documented in the approved arrangement (see Attachment 1: [Roles and responsibilities](#_Attachment_1:_Roles_1) and Attachment 2: [Establishment instructions to pest control contractors](#_Attachment_2:_Establishment) for further information).

## Related material

The following related material is available on the department’s website:

* Webpage: [ELMER 3 – Electronic legislation, manuals and essential references](https://www.agriculture.gov.au/biosecurity-trade/export/controlled-goods/meat/elmer-3)
* Webpage: [Approved arrangement guidelines – Meat](https://www.awe.gov.au/biosecurity-trade/export/controlled-goods/meat/elmer-3/aa-guidelines-meat)
* Webpage: [Approved arrangement guidelines – Wild game meat](https://www.awe.gov.au/biosecurity-trade/export/controlled-goods/meat/elmer-3/aa-wildgame)
* Webpage: [Approved arrangement guidelines – Poultry](https://www.awe.gov.au/biosecurity-trade/export/controlled-goods/meat/elmer-3/aa-guidelines-poultry)
* Webpage: [Export Meat Operational Guideline 3.13 Use of hazardous materials on-plant](https://www.agriculture.gov.au/sites/default/files/documents/ELMER-export-meat-operational-guideline-3-13-use-of-hazardous-materials-on-plant.pdf)

The following related material is available on the internet:

* Webpage: [Export Control Act 2020](https://www.legislation.gov.au/Series/C2020A00012)
* Webpage: [Export Control (Meat and Meat Products) Rules 2021](https://www.legislation.gov.au/Series/F2021L00334)
* Webpage: [Export Control (Wild Game Meat and Wild Game Meat Products) Rules 2021](https://www.legislation.gov.au/Series/F2021L00313)
* Webpage: [Export Control (Rabbit and Ratite Meat and Rabbit and Ratite Meat Products) Rules 2021](https://www.legislation.gov.au/Series/F2021L00308)
* Webpage: [Export Control (Poultry Meat and Poultry Meat Products) Rules 2021](https://www.legislation.gov.au/Series/F2021L00310)
* Webpage: [Australian standard for the hygienic production and transportation of meat and meat products for human consumption (AS4696)](https://www.publish.csiro.au/ebook/download/pdf/5553)
* Webpage: [Australian standard for the hygienic production of wild game meat for human consumption (AS4464)](https://www.publish.csiro.au/ebook/download/pdf/5697)
* Webpage: [Australian standard for hygienic production of ratite (emu/ostrich) meat for human consumption (AS5010)](https://www.publish.csiro.au/book/1602/)
* Webpage: [Australian standard for the construction of premises and hygienic production of poultry meat for human consumption (AS4465)](https://www.publish.csiro.au/ebook/download/pdf/5203)
* Webpage: [Australian standard for the hygienic production of rabbit meat for human consumption (AS4466)](https://www.publish.csiro.au/ebook/download/pdf/1497)
* Webpage: [Manual of Importing Country Requirements (Micor)](http://micor.agriculture.gov.au/Pages/default.aspx?_gl=1*zwho05*_ga*MTg1MDUxNzgxNy4xNjIxOTE1Mjkz*_ga_EFTD1N73JJ*MTY3NjYyMDUyOS4xODMuMS4xNjc2NjIxMzM2LjAuMC4w)

## Attachment 1: Roles and responsibilities

### Occupier/Establishment management

* Comply with relevant export legislation, importing country requirements and Australian standards as reflected in the establishment’s approved arrangement.
* Ensure that resources are available to undertake procedures to meet requirements.
* Ensure that pest control and significant findings are discussed as part of management review meetings.
* Implement corrective and preventive action within agreed timeframes.
* Engage only holders of full and current pest control technician licence as pest control contactors.
* Ensure that pest control monitoring activities are carried out regularly with detailed feedback on monitoring forms and that extra treatments are applied promptly when increases in activity are identified.
* Have processes in place that ensure barriers to pest and vermin entry are maintained, areas of pest harbourage are eliminated and repairs are carried out as part of pest and vermin control.
* Have a system in place for staff to report pest and vermin sightings.
* Have a process in place for communicating any significant vermin or pest activity to the relevant parties performing the treatments and reviewing any reports of pest and vermin activity as well as the effectiveness of corrective actions.
* Ensure the integration of other on-plant programs with pest and vermin control. For example, sanitation and hygiene, internal audits, waste disposal and maintenance programs.
* Ensure correct use and storage of chemicals is described in the approved arrangement and that only people trained in their use handle the chemicals.
* Notify the on-plant departmental officer of any significant pest or vermin activity and corrective actions taken.

### Pest control contractor

* Hold and maintain a current and full pest control technician licence with the appropriate state or territory authority.
* Provide regular services and respond promptly to requests for extra servicing made by the establishment in the event of increased activity or ineffective treatments.
* Provide detailed feedback on monitoring forms and provides recommendations on ways to improve pest and vermin control procedures at the establishment.
* Ensure correct use and storage of hazardous chemicals described in the approved arrangement.

### Field Operations Managers (FOM)

* Verification of the performance and effectiveness of system audits by assessing audit reports and periodically observing the performance of auditors.

### Area Technical Manager (ATM)

#### Establishment ATM

* Approves the establishment’s approved arrangement and/or any amendments made to it.
* Undertakes technical support visits.

#### EMSAP ATM

* Audits the establishment’s approved arrangement for compliance during Export Meat Systems Audit Program (EMSAP) audits.

### On-plant departmental officer

* Review significant amendments to the approved arrangement prior to submission for approval.
* Monitor the effectiveness of the pest control approved arrangement and verify correction actions.
* Review activity reports.
* Report pest and vermin sightings to the occupier.

### All establishment staff

* Report pest and vermin sightings to the occupier.

## Attachment 2: Establishment instructions to pest control contractor

Establishment instructions to pest control contractors must include the following aspects:

* Specification of the frequency that bait stations are required to be checked for activity and the actions that must be taken if activity is detected.
* Instructions for bait station maintenance and monitoring must ensure the following outcomes are achieved:
* Bait stations must be numbered and placed in accordance with the rodent station map of the establishment. Any additional bait stations must follow the same procedure.
* If a wax block is gnawed, the block must be replaced or trimmed.
* The form of identification used to indicate when the station has been checked must be documented.
* Dirty bait stations must be cleaned.
* Records of specific activity found at each station and any recommendations for control must be documented and communicated to establishment management.
* Records must be dated and signed by the contractor.
* Instructions for use of chemicals must ensure the following outcomes are achieved:
* Only chemicals documented in the approved arrangement are used on‑plant.
* Chemicals are used in accordance with manufacturer’s instructions.
* The contractor understands the actions required to avoid contamination of edible product and contact surfaces or materials.
* Use of chemicals does not contaminate edible product and contact surfaces or materials.
* Records are completed using the company agreed form.
* If hardcopy forms are used, records are completed in a legible manner and any corrections done neatly by a single strikethrough of mistakes and adding the correction (with initials and date).
* Electronic forms must be dated and contain the name and/or digital signature of the contractor.
* Any signs of rodent or other pest activity around or inside the establishment should be recorded and communicated to the occupier.

## Attachment 3: Recommended monitoring and corrective actions performed under the company quality assurance system

Table 1 Detection of internal pest activity

|  |  |
| --- | --- |
| **Internal detections of pest activity** | **Actions** |
| 1. General housekeeping | Undertake the following actions:   * remove rubbish * ensure goods are stored off the floor * cover materials. |
| 1. Check for evidence of pest and vermin entry | Check the following areas:   * roof/ceiling and ceiling spaces * doors, windows and wall junctions * small holes in floors, walls and ceilings * concealed spaces * exposed styrene panels * drainage lines (inlets and outlets).   If activity is evident, then implement the use of non-toxic indicator baits or traps:   * Traps should be checked daily during pre-operations. * Consider locating indicator baits/traps in related rooms/areas. |
| 1. Insect activity within production areas | Check the following:   * Access chutes which lead to inedible areas (particularly for positive outward airflow and the effectiveness of chute flaps). * Personnel movement. Ensure intended doorways are used, not emergency exits (which may not have air curtains installed). * Where air curtains are fitted, check for effectiveness. * The location of storage and waste materials in relation to entry doors.   Inedible material for rendering in open trailers awaiting removal and rubbish containers act as attractants. Held waste should be removed regularly during production to minimise the build-up of odours. Any build-up of material is minimised, and non-by-product waste treated with repellents. |
| 1. Check all materials and product | If pest or vermin-affected, take immediate action as per the approved arrangement. This may include the following:   * disposal of materials * condemnation of product * reworking or trimming of contaminated areas * downgrading of product. |
| 1. Reporting | The actions taken must be documented and follow-up actions including any preventative measures to stop ingress of pest and vermin. |

Table 2 Detection of external pest activity

|  |  |
| --- | --- |
| **Detections of external pest activity** | **Actions** |
| 1. Environment | * Stop rodents entering the plant by cleaning up rubbish and maintaining lawns surrounding the plant and other buildings. * Ensure there is clear space around the plant, especially near doors. |
| 1. Building openings | Check all openings (drain outlets, underneath buildings and inedible areas) and grate as needed. |
| 1. External buildings | Check the following:   * Outbuildings and storage area for potential harbourage sites (for example: rendering, chemical stores, dry store, canteens, livestock feed store). * External building areas for access points (via the roof, tunnels, water treatment shed). |
| 1. Traps and bait stations | * Consider placing internal indicator baits or trap stations in non‑production rooms where entry door is near to an active external bait station. * Increase bait stations in those perimeter zones where multiple signs of activity are detected. |

## Attachment 4: Definitions

Approved arrangement

An approved arrangement under Chapter 5 of the *Export Control Act 2020*.

An arrangement for a kind of export operations in relation to a kind of prescribed goods approved by the Secretary. An approved arrangement:

* documents the controls and processes to be followed when undertaking export operations in relation to prescribed goods for export
* enables the Secretary of the Department of Agriculture, Fisheries and Forestry to have oversight of specific export operations.

Area Technical Manager (ATM)

A Commonwealth authorised officer with veterinary qualifications who has responsibility for the supervision, technical performance, assessment and verification of technical standards and operations in a defined group of export meat establishments.

*Establishment ATM*

* ATM with day-to-day on-plant responsibilities, on-plant staff technical review responsibilities and an establishment Critical Incident Response Audit (CIRA) audit role.
* Approves the establishment’s approved arrangement and/or any amendments made to it.

*EMSAP ATM*

ATM conducting the EMSAP audit at the establishment. This individual has not been the ATM with day-to-day on-plant responsibilities at the establishment being audited during the previous two years (i.e. held the Establishment ATM role).

Auditor

A person who under Chapter 9 Part 1 of the relevant Export Control Rules 2021 may conduct an audit.

Australian Standard

In this document, refers to the Australian Standard that applies to the relevant commodity, and may refer to either the:

* Australian standard for the hygienic production and transportation of meat and meat products for human consumption (Australian standard AS4696)
* Australian standard for the hygienic production of wild game meat for human consumption (Australian standard AS4464)
* Australian standard for hygienic production of ratite (emu/ostrich) meat for human consumption (AS5010)
* Australian standard for the construction of premises and hygienic production of poultry meat for human consumption (AS4465)
* Australian standard for the hygienic production of rabbit meat for human consumption (AS4466).

Chemical compounds

A subset of potentially hazardous materials/substances. Chemical compounds can have the same meaning of chemical, hazardous substance(s) or hazardous materials in this document and in referenced documents.

Departmental Food Safety Auditor (FSA)

A Commonwealth authorised officer who undertakes inspections and audits of export-registered establishments.

Departmental Food Safety Meat Assessor (FSMA)

Commonwealth authorised officer who has meat inspection qualifications and works on export-registered slaughtering establishments.

Edible

Product that has had the disposition of fit for human consumption applied.

Export Control Rules 2021

In this document, refers to the Rules made under the *Export Control Act 2020* and may refer to either the:

* Export Control (Meat and Meat Products) Rules 2021
* Export Control (Wild Game Meat and Wild Game Meat Products) Rules 2021
* Export Control (Rabbit and Ratite Meat and Rabbit and Ratite Meat Products) Rules 2021
* Export Control (Poultry Meat and Poultry Meat Products) Rules 2021.

Field Operations Manager

A Commonwealth authorised officer (senior veterinarian) with overall responsibility for the operational management of technical policies and procedures of the Export Meat Program.

Insecticide

A substance used for killing insects.

Occupier

As defined in section 19 of the *Export Control Act 2020*.

* The occupier of a registered establishment is the person in whose name the establishment is registered.
* An occupier of an establishment (other than a registered establishment) where export operations in relation to goods are, were or will be carried out, is:
* the person that operates, operated or will operate the business of carrying out export operations in relation to goods at the establishment, or
* a person that manages or controls, managed or controlled or will manage or control export operations carried out in relation to goods at the establishment.

On-plant departmental officer

On-plant supervisor may refer to an OPV, FSMA or FSA.

On-Plant Veterinarian (OPV)

A Commonwealth authorised officer (veterinarian) employed by the Department to conduct ante‑mortem inspection and to provide daily supervision of post-mortem inspection and verification of the establishment’s approved arrangement.

Pest

Includes invertebrates (including but not limited to insects and spiders), rodents, reptiles, amphibians, and any other mammals or birds not present at the establishment for the purposes of being processed for the production of meat).

Pesticide

A substance used to kill animals, fungi or plants.

Tier 2 export-registered establishment

An establishment operating under the Export-Registered Australian Standard Meat Establishment (Tier 2) Scheme. Tier 2 establishments have a full-time departmental on-plant presence to ensure maintained compliance.

Vermin

Includes all rodents, wild birds and animals excluded from the establishment.