

Guidance tool for the Eggs and Egg Products Primary Production and Processing Standard (v 4 Aug 2022)

Explanatory notes

This is a supporting document to the Primary Production and Processing Standard for Eggs and Egg Products (Standard 4.2.5). It is not a legal document. This document is prepared to give practical advice to industry on a range of matters considered to meet the outcomes-based requirements of Standard 4.2.5, which is mandatory in all Australian states and territories.

Information provided in this guidance tool should be read as advisory. It is intended to give examples and advice on measures in the egg supply chain to meet Standard 4.2.5 (i.e. aid in preparing food safety management statements required by the Standard).

Businesses are advised to consult their state-based regulator to determine if additional, local regulation applies to their activities. An example is the Biosecurity SE control order 2020 (as amended on 23 June 2022) operating in NSW until 30.6.2024, all eggs produced in NSW over this period must comply with measures provided in the control order (i.e. SE testing is mandatory in NSW for egg production premises for this period).

This guidance tool does not extend to retail activities. These are captured by Chapter 3 food safety standards.

Information provided within this tool should be considered within the context of existing regulatory compliance processes, i.e. new and additional auditing will not be instigated by regulators to verify industry compliance, regulators will use existing compliance operations.

The following activity groups have been identified as included by Standard 4.2.5 and are covered by Compliance Plans A and B attached. The activity groups are:

1. Egg producer: grows only, may transport, supplies direct to a processor for grading and may sell acceptable (i.e. graded, stamped) eggs off farm once received back from processor. May not sell or supply ungraded, unstamped egg to another party who is not a licensed processor.
2. Egg producer: grows & grades own eggs, may transport & store, may sell acceptable eggs off farm, may supply unpasteurised egg pulp to processor for pasteurising.

3. Egg processor: grows and grades their own eggs, as well as receives eggs from other producers for grading. May also transport and store. May also supply egg pulp to another processor for pasteurisation.
4. Egg processor: does not grow, grades eggs, may transport and store eggs, may supply unpasteurised egg pulp to another processor for pasteurisation.
5. Egg processor: Pasteurises egg product only.

Two plans have been developed to promote consistent implementation of the standard for these various activities. The plans, which are in draft form and may be subject to change arising from standards development and/or consistent implementation processes:

- describe the key issues of compliance
- contain minimum requirements for compliance with the standard
- provide a jurisdiction’s intent for monitoring industry compliance with the standard.

Compliance plan	Applies to activity group(s)
A	1-4
B	5

Notes:

Some egg producers/processors may not fit exactly into one of the above groupings. Each plan should be applied where applicable to operations.

For example, Group 1 would not be required to set out details in relation to grading. If groups 2-4 undertake pasteurisation, plan B will also apply.

Further details describing acceptable means of compliance will be found in the reference materials (see attached list) or in the guideline for a model food safety management statement for an egg producer or an egg processor. In all instances egg businesses are advised to contact the relevant food regulator within their jurisdiction for further advice concerning an acceptable means of compliance before adopting matters described in these plans into their businesses.

For the purpose of this material “grading” includes the following - grades (sorts into size), packs, washes, candles or assess for cracks, oils, pulps eggs for supply to a processor for pasteurisation, or stores.

Guidance plan – A: Egg production (grows eggs, may also grade eggs)

Hazard: Unacceptable¹ eggs being offered for sale or supply into the human food supply chain.

Compliance requirement – Industry	Monitoring requirements – Industry	Monitoring requirements – Government
GENERAL FOOD SAFETY MANAGEMENT²		
<p>The food safety management statement must set out how a business proposes to manage the identified hazards associated with the following:</p> <p><i>Egg and egg pulp operations.</i></p> <p>Outcome - the business implements a system to allow for the collection, supply, storage and transport of eggs and egg pulp. The business also identifies its grading, cleaning, and crack detection processes for eggs.</p> <p>(e.g. the business identifies its collection process, storage and transport conditions for eggs and egg pulp. The business further</p>	<p>Evidence/records to be kept to demonstrate that:</p> <p>Control measures have been implemented and are monitored for:</p> <ul style="list-style-type: none"> eggs and egg pulp receipt and distribution records provide for traceability of all shell eggs back to the farm of origin; 	<p>Regulator to monitor industry activity using current monitoring arrangements.</p> <p>e.g. may include inspection or Audit, including biosecurity assessment and Salmonella testing or other monitoring arrangement depending on regulator’s legislation, and existing processes already applied.</p>

¹ *Unacceptable* means a cracked or dirty egg, or egg product that has not been processed in accordance with clause 21, or egg product which contains a pathogenic micro-organism, whether or not the egg product has been processed in accordance with clause 21. It is noted that in Standard 4.2.5, *unacceptable* refers to unacceptable eggs.

² Note that businesses with existing food safety arrangements (e.g. HACCP based food safety programs, DAWE approved arrangements, or Standard 3.2.1) could be considered to meet the outcomes of a food safety management statement. However, in all instances the regulator will be required to verify that a business’s existing food safety arrangement meets the requirements of Standard 4.2.5.

Compliance requirement – Industry	Monitoring requirements – Industry	Monitoring requirements – Government
<p>identifies its process for the identification, segregation and control of unacceptable eggs - e.g. are they sent to a processor for cleaning, or to a business that manufactures processed egg product, disposed of?; What effective crack detection method is used by the business, (e.g. candling).</p> <p>Business identifies how it maintains shell egg traceability back to the source farm if it receives eggs from other egg producers for grading.</p> <p>Inputs</p> <p>Outcome – Chemical, physical and microbiological hazards associated with inputs are appropriately managed. This includes appropriate maintenance of nesting environments to minimise risks of contamination in the immediate period following lay and prior to collection.</p> <p>* Stockfeed, agricultural, veterinary medicines and cleaning chemicals, water, chicks, litter, shell egg packaging materials).</p> <p>* Critical – all surface water used for drinking, cooling and cleaning is maintained to a standard so as not to make eggs unsafe or unsuitable. Routine checks of water quality is recommended, with appropriate records maintained (e.g. Bore water tested for microbiological quality; records of treatments applied to surface water kept, e.g. the chlorination level (ppm) and tested for <i>microbiological quality</i>. Alternative is to use potable water for these activities.</p>	<ul style="list-style-type: none"> • bird health: e.g. health and vaccination certificates (e.g. Salmonella typhimurium vaccines) held for birds received from pullet rearing facilities or hatcheries • Inputs: e.g. receipts kept for purchased feed. • bird health: records kept of any Salmonella monitoring conducted by the farm. • Packaging: Shell egg packaging stocks are inspected prior to use so they are fit for purpose (e.g., use of new stock, or re-use of cleaned and sanitized packaging stock); • monitoring logs used for recording withholding periods for agricultural & veterinary chemicals used on premises; • flock monitoring: birds are routinely inspected to ensure flock is in good health, with any routine bird and/or environmental <i>Salmonella</i> testing undertaken on a voluntary basis, or as required by state-based legislation (e.g. 	<p>Request evidence of compliance with any necessary biosecurity legislation (e.g. Property Identification Code).</p> <p>The frequency of monitoring will be based on risk and performance.</p> <p>ISFR will institute a national survey of the egg industry under this revised compliance plan 2 years following the date of FRSC endorsement.</p>

Compliance requirement – Industry	Monitoring requirements – Industry	Monitoring requirements – Government
<p>* Controls should be implemented to minimise the opportunity for birds (hens and wild-birds) to defecate in water or feed.</p> <p>Waste disposal</p> <p>Outcome – The business implements systems to manage waste materials so they do not present a source of contamination for eggs.</p> <p>(e.g. storage and disposal of dead birds to mitigate risk of vermin and other pest animal access, removal of litter, garbage, manure, spoiled feed, disposal of unacceptable eggs, disposal of un-sanitary shell egg packaging materials to prevent further use in the human food supply chain).</p> <p>Health and hygiene</p> <p>Outcome – Personnel and visitors use appropriate health and hygiene practices to minimise contamination of eggs and egg pulp and also birds and bird environment, feed, etc.</p> <p>* egg handler personal hygiene and practices, wearing appropriate farm clothing and footwear, soap and water and/or disinfectant available for hand washing and sanitation at all entrances to egg production areas and other areas on premises. Hand washing facilities available for egg handlers after picking up deceased birds, floor eggs and cracked and dirty eggs. Ensure floor eggs (i.e. broken eggs) are picked up in a timely manner and not left for birds to eat.</p>	<p>NSW – SE testing is mandatory under the Biosecurity SE control order 2020 as amended 23 June 2022 until 30.6.24).</p> <ul style="list-style-type: none"> • Water quality: routine inspection of on-farm water source undertaken with any water quality test results kept. • Production areas: disinfectant applied to shoes entering production areas (e.g dosage of sanitising agent used is adequate for purpose, any solutions/foot baths used are monitored regularly and replaced with clean sanitiser as required, foot covers applied where required). • Verification checks: internal audits, visual inspections, appropriate signage present at entrances to egg production areas warning un-authorized persons/equipment/vehicles to not enter. • Corrective action/s have been taken when necessary (e.g. description of actions for 	

Compliance requirement – Industry	Monitoring requirements – Industry	Monitoring requirements – Government
<p>Persons who are visibly unwell, or report gastrointestinal illnesses will not be permitted to have direct contact with hens or eggs until they are symptom free.</p>	<p>restoration of control, dealing with unacceptable eggs, loss of traceability of shell eggs in the supply chain, and prevention of recurrence).</p> <ul style="list-style-type: none"> Records kept for cleaning and disinfection procedures applied. e.g. chemicals used, effective dose applied and temperature of cleaning solutions, temperature of cleaning solution, training records for staff, cleaning and sanitation records for egg cleaning equipment. 	
<p>Skills and knowledge</p> <p>Outcome – Personnel have the necessary level of skills and knowledge of food safety and hygiene associated with egg and egg pulp production.</p> <p>(e.g. staff able to demonstrate competency upon request).</p>	<p>Evidence to show that all chemicals, feed, medicines (especially insecticides used in contact areas) are suitable for birds producing eggs for human consumption</p>	
<p>Premises equipment and transport</p> <p>Outcome – Systems are implemented to ensure that premises, equipment and transport vehicles used in poultry production do not present a source of contamination for eggs and egg pulp.</p> <p>* Premises, equipment and transport vehicles are designed, constructed, cleaned and maintained in an appropriate state.</p>		

Compliance requirement – Industry

Monitoring requirements – Industry

Monitoring requirements – Government

- * Premises provides cleaning and disinfection equipment for all vehicles entering production area. Premises should also require vehicles entering the premises but not the production area to park in a separate location.
- * Business implements pest, vermin, domestic and wild animal control and cleaning programs.
- * Egg production areas formally demarcated from non-egg production areas on premises;
- * Appropriate signage erected at entrances to egg production areas advising of appropriate practices/procedures to be followed;
- * Poultry housing areas should be designed, constructed and maintained in such a way to prevent the entry of vermin and other pest animals.
- * Housing areas constructed to prevent the entry of pets and other animals e.g. sheep or cattle if kept on site). Vermin control strategies should be implemented in egg production areas, these should include; map to be kept of rodent bait stations placed on premises, bait stations to be frequently checked and removal of vermin habitat – e.g. overgrown grass, debris from the immediate outside of egg production areas and range areas (baits to be rotated regularly).
- * Entrances to egg production areas may provide for devices to allow for the scraping of shoes to remove visible organic matter (or pre-wash baths) and footbaths containing suitable amount of active disinfectant, or provide for 'shed boots' – boots only to be worn in

Compliance requirement – Industry

Monitoring requirements – Industry

Monitoring requirements – Government

egg production areas (e.g. colour coded boots per each shed, or provide for foot covers to be applied to the outside of boots).

* Cleaning and sanitation programs implemented in egg production areas; including conveyor belts used in each shed (clean, sanitise and dry before returning to shed), nest pads (cleaning and replenishment program implemented) and egg washing equipment.

Records maintained for 12 months of all things delivered/removed from egg production areas).

Bird Health

Outcome – A process is implemented to monitor bird health so that birds displaying symptoms of disease or other conditions likely to impact on egg safety are removed from the rest of the flock.

(e.g. Active surveillance of flock, identification and segregation of treated birds, flock surveillance program implemented on a voluntary basis (*Salmonella* Spp. and/or SE) or as required by state-based legislation (e.g. NSW – SE testing is mandatory under the Biosecurity SE control order 2020 as amended 23 June 2022 until 30.6.24), records maintained of all birds received on premises, bird mortalities as well as treatments given to birds for disease management or poor laying performance).

Sale and supply

Outcome – Unacceptable eggs are identified and are not sold for human consumption. They may be sold to a processor for cleaning

Businesses must have evidence to show compliance with the traceability requirements (e.g. distribution logs).

Compliance requirement – Industry

Monitoring requirements – Industry

Monitoring requirements – Government

(dirty eggs) or a business that processes egg products (cracked eggs, unpasteurised egg product), or they may be disposed of.

(e.g. Distribution records maintained to record sale and supply of eggs for 12 months).

Traceability

Outcome – Eggs must not be sold or supplied for human consumption unless each individual egg is marked with the correct producer unique identifier. Each package or container of unpasteurised egg pulp or egg product supplied to a processor for pasteurisation must be labeled in accordance with the Food Standards Code, i.e. a statement that the product is unpasteurised. Business to maintain a traceability system to allow tracing to whom the eggs and/or unpasteurised egg pulp or unacceptable eggs have been sold. Ungraded eggs must not be sold to a business other than an egg processor. Business is required to maintain a traceability system to provide for the identification of the farm of origin of all shell eggs received. Business is required to maintain written records of all shell eggs received and distributed for 12 months.

Egg processors who grade other producers' eggs must also have a system in place to ensure that each batch of eggs is separated in such a way to prevent co-mingling with eggs sourced from other farms.

Guidance plan – B. Egg Processor: Pasteurises egg products

Inherent risk: Unacceptable eggs³ being offered for sale and supply for human consumption.

Compliance requirement – Industry	Monitoring requirements – Industry	Monitoring requirements – Government
<p>GENERAL FOOD SAFETY MANAGEMENT⁴</p> <p>The food safety management statement must:</p> <p>(a) systematically identify the potential hazards that may be reasonably expected to occur in all food handling operations of the business;</p> <p>(b) identify where, in a food handling operation, each hazard identified under paragraph (a) can be controlled and the means of control;</p> <p>(c) provide for the systematic monitoring of those controls;</p> <p>(d) provide for appropriate corrective action when that hazard, or each of those hazards, is found not to be under control;</p>	<p>Evidence/records to be kept to demonstrate that:</p> <ul style="list-style-type: none"> Control measures have been implemented and are monitored (e.g. time/temperature records). Verification checks (e.g. internal audits, visual inspections, final product microbiological monitoring) have been made of the food safety management statement to confirm operating as per the management statement. Corrective action has been taken when necessary (e.g. description of actions for restoration of control, dealing with 	<p>Regulator to instigate appropriate monitoring arrangements.</p> <p>e.g. may include inspection or Audit, or other monitoring arrangement depending on regulator’s legislation.</p> <p>The frequency of monitoring will be based on risk and performance.</p> <p>ISFR will institute a national survey of the egg industry under the Co-ordinated Food Survey Plan two years following the commencement date of the Egg Standard.</p>

³ *Unacceptable* means a cracked or dirty egg, or egg product that has not been processed in accordance with clause 21, or egg product which contains a pathogenic micro-organism, whether or not the egg product has been processed in accordance with clause 21. It is noted that in Standard 4.2.5, *unacceptable* refers to unacceptable eggs.

⁴ Note that businesses with existing food safety arrangements (e.g. HACCP based food safety programs, DAWE approved arrangements, or Standard 3.2.1) could be considered to meet the outcomes of a food safety management statement. However, in all instances the regulator will be required to verify that a business’s existing food safety arrangement meets the requirements of Standard 4.2.5.

Compliance requirement – Industry

Monitoring requirements – Industry

Monitoring requirements – Government

Outcome – The business implements systems to manage waste materials so they do not present a source of contamination for eggs.

(e.g. waste water, sewage, garbage, unacceptable eggs or unpasteurised egg product that is not intended for pasteurisation).

Skills and knowledge

Outcome – Personnel have the necessary level of skills and knowledge of food safety and hygiene associated with the processing and handling of egg product.

(e.g. staff required to demonstrate competency).

Health and hygiene

Outcome – Personnel and visitors use appropriate health and hygiene practices to minimise contamination of unpasteurised and post-pasteurised egg product.

(e.g. personal hygiene practices implemented to prevent egg product becoming unacceptable following processing).

Premises, equipment and transport

Outcome – Systems are implemented to ensure that premises, equipment and transport vehicles used in the processing of egg product do not present a source of contamination for egg product.

Compliance requirement – Industry**Monitoring requirements – Industry****Monitoring requirements –
Government**

(e.g. Premises, equipment and transport vehicles are designed, constructed, cleaned and maintained in an appropriate state. Egg washing, if undertaken, is conducted under safe conditions (effectively cleaned and maintained; using safe inputs [water/disinfectants/sanitiser]; temperature gradients are considered) which will not introduce additional risks of contamination. Business implements pest, vermin, domestic and wild animal control and cleaning programs).

Processing of egg product

Outcome – Business implements validated system for the processing of egg product. System must be capable of producing egg product that is not unacceptable (e.g. egg product must not contain any pathogens following processing). Business maintains evidence that validated system is operating effectively.

(e.g. processing logs maintained to ensure correct time/temperature profile is achieved; evidence (lab results) is maintained that processed egg product is free from pathogens). It is further noted that pasteurised egg products are required to comply with Standard 1.6.1- Microbiological limits for food, contained within the Australia New Zealand Food Standards Code.

Traceability

Outcome – Egg processors' who supply processed egg product must mark each package or container in compliance with the Food Standards Code.

Processors must also implement systems to allow businesses who supply product to them to be traced.

(e.g. Distribution and receipt logs maintained).

Storage or transport of processed egg product

Outcome – The business that processes egg product implements sufficient controls (e.g. time and temperature pre and post pasteurisation) to prevent the growth of pathogenic microorganisms.

(e.g. refrigerated transport)

Sale and supply

Outcome – Unacceptable eggs, including unpasteurised egg product, or processed egg product that contains pathogens is not sold for human consumption. Egg product may only be sold or supplied for human consumption once it has been pasteurised and is free of pathogens.

(e.g. Distribution records maintained to record sale and supply of eggs).

Reference materials

Standard 4.2.5

[Primary production and processing standard for eggs and egg product](#)

Egg production: (may also grade eggs)

1. [Australian eggs food safety homepage](#)
2. [National Farm Biosecurity Manual: Poultry Production](#)
3. [National Farm Biosecurity Technical Manual for Egg Production](#)
4. [Grading, washing and package of eggs](#)
5. [NSW DPI - Salmonella Enteritidis information page](#)

Egg Processors: Pasteurises egg products

1. [A Guide to Standard 3.2.1 food safety programs](#)
2. [Safe Food Australia: A Guide to the Food Safety Standards](#)
3. [Australian Eggs Food Safety homepage – egg processing](#)
4. [Egg stamping guide](#)