



# **Egg Standards of Australia for Grading and Packing Floors:**

## **Interpretation Guideline**

**November 2019**



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## Forward

Welcome to the Egg Standards of Australia for Grading and Packing Floors: Interpretation Guideline. This Guideline is intended to provide support and accompaniment to the Eggs Standards of Australia (ESA) for Grading and Packing Floors (**issued November 2019**). It provides guidance only. It should not be used as a substitute for the Standard, but should be read in conjunction with the Standard. Full details of the Standard including Code Elements, Compliance Criteria and Records required are contained within the Standard. This document helps in the understanding of each Code Element within the Standard and identifies and suggests methods of compliance. Where appropriate, examples are given to explain the type of documents and procedures required, and the level of detail that may be required by a third-party certification auditor.

The Guideline and its contents are designed for industry and auditors to help interpret the Standard across all areas of egg packing, grading and processing (where applicable). The exact requirements for any particular egg packing facility or methodology will, however, be specific to each site and situation. It is therefore not recommended that users of this Guideline rely solely on the information provided within this document. It is advised that users of this Guideline consider ongoing changes to both legislative and voluntary compliance requirements, and regular checks and consultation are recommended.

The Guideline does not specifically form part of the requirement to achieve certification to the ESA. Packing floors will, however, need to demonstrate that they have considered the relevant topics included in this Guideline as they relate to the elements of the ESA. Examples are provided in this Guideline for consideration but should be only used in the correct context for the specific business. Packing Floor practices and activities should be able to withstand challenge by a third-party auditor and be in accordance with good industry practices.

During an audit, evidence will be collected and observations will be made by the auditor for each particular requirement. The level of non-conformity assigned by the auditor against a requirement of the Standard is an objective judgement with respect to severity and risk. The judgement is based on the evidence sighted during the audit and the intent of the requirement, and is independently verified by the certification body management.

Certification to ESA was developed to establish a common standard for industry practices relating to the grading and packing of eggs from laying hens. The scope of ESA is from the point of delivery of eggs to the pack shed, up to the point of transferral of packed eggs from the packing facility for human consumption.

The primary objectives of ESA for Grading and Packing are:

- to set out the requirements for best practice in the packing of eggs
- to provide a uniform mechanism for the verification of egg packing practices
- to provide a means of demonstrating best practice and continual improvement.

## Participation Levels

Participation in ESA is voluntary and application for certification is open to all egg packers. Certification to the Standard, however, will only be granted to egg packers that meet the relevant requirements as set out in the ESA Standard and ESA Program Rules. Each element is classified as Level 2 or Level 3, defining the two levels of participation in ESA.

| Level                          | Requirement  | Description  |
|--------------------------------|--|--|
| <b>Level 2 – Core</b>          | Compliance with all Level 2 elements required.             | Intermediate level participation recommended for egg packers with a more developed compliance system and record keeping. Customers of Level 2 floors may not be major retailers but their requirements (such as testing requirements and specifications) shall still be met. |
| <b>Level 3 – Comprehensive</b> | Compliance with all Level 2 and Level 3 elements required. | Advanced level participation for egg packers with a fully developed compliance system and record keeping in accordance with the requirements of major retail customers.  |

## Using this Guideline

Where there is ‘– Levels 2 & 3’ in the heading, the element criteria are exactly the same for Level 2 and 3 and the advice applies to both levels.

“**Level 3 –**” before a sentence indicates the advice is most applicable to Level 3.

“**Level 2 –**” before a sentence indicates the advice is most applicable to Level 2.

## Requirements of the Standard Management

### 1.1 Regulatory Approvals

As required under any legislation a current copy of the registration or licence with the regulatory authority is sighted for **Levels 2 and 3**.

**Level 3** – If any changes occur to the business situation (including but not limited to change of ownership, change of farms supplying eggs, changes to the egg production method used) these **must be recorded** and then **communicated** to all customers.

### 1.2 Policy Statements

The commitment statement is required to be **signed by the owner** or senior management stating the business's commitment to the rules of the ESA program and to all relevant legislative requirements, and at **Level 3**, also to customer requirements.

This statement has to be **reviewed at least annually** by senior management and is required to be displayed in a prominent position on the Grading Floor – where everyone can see it clearly.

The business management must also make sure that everyone in the business knows about this commitment statement, understands it **and actually makes sure that it is put into effect**. This could be via the induction training for staff when they start work and in the annual refresher staff training.

The statement must aim for continuous improvement within the business – this could be achieved by ensuring that **all staff are trained** for their jobs and have the appropriate equipment.

### 1.3 Management Responsibility

There must a documented **organisation chart** that covers all staff that are responsible for food safety and, for **Level 3**, quality requirements for the Grading and Packing of shell eggs.

At **Level 3** it is expected that the **2IC staff for each position** will be documented on the organisation chart for all roles including those concerning quality and food safety.

The business owner/senior management have to demonstrate and communicate their commitment to food safety, legislative and, at **Level 3**, product quality requirements. The simplest way to do this is to ensure that this information is documented within the policy statement as described in **Section 1.2**.

The owner, senior staff and auditors must be able to **demonstrate that they understand** all relevant legislation and Codes of Practice regarding the grading and packing of shell eggs. This could be through the use of documented training programs (refer to **Section 1.35**), which should ensure that actual safe food practices are implemented daily on the Grading Floor.

Records and documentation that cover all aspects of the food safety and quality systems, (including animal welfare and environmental aspects) are to be made available for auditing purposes.

The person who is available for the audit, should have **operational accountability**. This is someone who can help demonstrate that the process is adhered to.

**A Corrective Action Request (CAR)** system must be in place to be used for any non-conformances that occur during the day to day running of the food safety system.

## 1.4 Management Review

Management reviews must be undertaken at least on an annual basis and be **attended by senior management**.

The agenda of these meetings must include the previous meeting's minutes, any corrective action taken, results of internal/external audits/trace checks, and a review of past customer complaints and any regulatory issues/incidents. These meetings are not intended to implement solutions to individual issues, but are to be a **strategic whole of business review**. This is why they should only be carried out annually or possibly 6 monthly. The intent is different from that of a monthly update meeting. The easiest way is to have a documented **agenda** that covers all required items, and to book all relevant staff in for the meeting well in advance of the set date. That way all staff members can undertake their required data collection and bring that information to the meeting for easy review.

Even if the business is very small, at least once a year the management team needs to sit down and carry out a strategic business review. The point of this meeting is a formal review of the previous year's performance, and a planning session for the next year's performance.

**Level 3** – The food safety and quality objectives (i.e. Key Performance Indicators or similar) must be reviewed, and there needs to be an opportunity for staff to raise any issue regarding food safety, quality or legislative/regulatory requirements with senior management. This could be carried out by holding a tool box meeting at regular times.

## 1.5 Documentation and Records Control and Storage

The food safety manual (including the recall requirements) **must be made available** and be understood by **all staff** – being the current version with all documents dated, the version number, and 'completed by whom' documentation.

All records kept for ESA must be in a clear and legible, and up to date form – the current version of documents used – **with records kept for at least 2 years**. There should be a master list of all documents used and the current revision status. There should also be a documented procedure for record keeping; covering the methods and responsibilities, monitoring and verification procedures, and the maintenance of records and documents. Mistakes happen, however documentation needs to demonstrate genuine correction and record keeping. **Liquid paper shall not be used**.

The Grading Floor must have a copy of the **ESA Grading and Packing standard on site**.

**Level 3** – An amendments register shall be in place which outlines the reasons for any changes to certificates and documents.

Auditors will make sure that these records are kept in a **secure location**.



## 1.6 FSP/FSMS, HACCP and GMP Plans

Pre-requisite programs such as Good Manufacturing Practice (GMP) and Good Hygiene Practice (GHP) need to be implemented and complied with.

**Level 2** – The Food Safety Program (FSP) and Food Safety Management Statement (FSMS) **must identify all potential food safety hazards**, how they are controlled and how they will meet the State or Territory legislative/regulatory requirements. They must be kept on site and be documented in English.

The FSP and FSMS must include all shell egg processes from receipt through to storage, washing, drying, packing, cleaning, and transportation of the finished article, and be kept on site.

Monitoring records are kept for all procedures, and are validated annually.

The FSP must be reviewed at least annually, and when and if changes occur within the system.

**Level 3 – HACCP team** to be convened, with the team leader completing a HACCP training course delivered by an RTO every 3 years. The refresher course every 3 years is a requirement of the major Australian retailers (refer to **Section 1.35**).

The **HACCP plan** must include all food safety hazards, product defects and relevant control measures – the **scope, product description**, and intended and alternative **use** must also be included.

The HACCP plan must include a process control **flow chart** that would list all of the steps in the processes within the scope of the HACCP system, and include any hazard – hazard analysis is undertaken to identify any chemical, microbiological or physical steps in the process, and limits are set for each step.

Critical Control Points (**CCP**) and Quality Control Points (**QCP**) are identified (e.g. wash water temperature and the potential to cause cracked eggs due to drastic temperature difference) and action to be taken if breaches of any limits occur.

Records showing **compliance** must be in place. This means that the Grading Floor must hold, and be able to find, records – electronic or paper – that prove that they have met all of the requirements of their HACCP plan every day that the Grading Floor is in operation. These **records** could be CCP monitoring records, product assessment records, grading records, waste records, cleaning records, etc.

It must be clear that HACCP plans are **reviewed** and validated at least **annually** by the HACCP team, and that the **results are documented**. The HACCP plans should also be **reviewed when any changes** are made to the product types, processes or equipment.

## 1.7 Internal Checks, Audits, Complaints and Corrective Action

Internal audits that **review the entire Food Safety system** against the ESA standard, and relevant legislation/regulations and customer requirements, need to be conducted at least annually or when ever change to the food safety system occurs. These audits must be **documented and reviewed** in the management review meetings (refer to **Section 1.4**).

Site GMP audits need to be carried out on all areas of the site, including all processing, storage, maintenance, and all external areas. The **GMP audits** need to be **based on risk**; this should be documented. Many processors undertake these types of audits monthly.

The staff who carry out the audits – of all types – need to be competent. They may have learned how to audit on the job, under the guidance of someone who has had formal training. These training activities should be documented (refer to Section 1.35). Additionally, it is ideal that the staff members are not auditing their own work areas, i.e. neither the area where they wrote the procedures nor the area in which they work.

**Level 3 – Element 4** – Requires that a corrective and preventive action **procedure** in addition be documented.

**Levels 2 & 3, Element 4 & 5 and 5 & 6 respectively** – CARs must be completed and issued **if non-conformances are identified**, including customer or regulatory complaints – full details of the nonconformity **must be documented** including short and long term action, to prevent the problem from recurring.

**Levels 2 & 3, Element 6 & 8 and 7 & 9 respectively** – All product related customer complaints received are to be recorded.

**Level 3, Section 10 – Trends of customers' complaints** will be analysed (see Section 1.2 for additional guidance).

## 1.8 Customer and Stakeholders Requirements

Shell eggs are to comply with all **Shell Egg Specifications** (Appendix 1 of the Grading and Packing Standard) and egg weights are checked before being packed – all packed eggs are checked against the specifications (**no cracks or organic material**) for compliance, before dispatch. Note that for **Level 2**, only the egg external factors (e.g. weight, no cracks or organic material) are required.

Where customers' **finished product specifications** are provided, they are to be held on-site and be accessible by the staff.

All customers are to be **documented** in a **register** with customer specifications, and the register is to be **reviewed** at least **annually**. The register can be paper or electronic.

If there are any requirements in relevant legislation stating that **customers have to be notified** in specific circumstances, then evidence of these notifications must be held, i.e. in the case of recalls.

**Level 3, Element 7** – Any changes that occur in ingredients or processing specifications shall be **reviewed at least annually**.

## 1.9 Supplier Management

All approved suppliers have to comply with all food quality and safety requirements of ESA, and suppliers are **reviewed annually**.

**The easiest way to meet all of these requirements is to write a procedure where you state what you are going to do to 'approve' all of your suppliers of eggs, and also those businesses that supply packaging materials and services like transport, pest control, etc.** (refer to the following Sections, 1.15, 1.21, 1.27, 1.29 and for **Level 3**, 1.33 and 1.38 for more guidance)

The Grading Floors also need to keep the **records** of lab results, certifications and other documentation that was used to ‘approve’ the suppliers.

**Section 2** – Specifications/Safety Data Sheets (SDS)/Certificate of Analysis/Global Food Safety Initiative (GFSI) audit certificate, etc., showing **suitability for use** in egg grading, egg pulp and egg products in production, must be documented and kept.

**Section 4** – **The register of approved suppliers** must include names, contact details and materials or services provided, and any emergency suppliers. A list of production diseases monitored by the supplier must also be included. All claims are verified to be correct and true.

**Section 5** – The business **must not purchase** any egg products that they know, or suspect, are **not suitable for human consumption**.

**Section 6**- For a business purchasing eggs or egg products from another egg business for the purposes of on selling, the business needs to have proof that bought in eggs are produced at a site with at least the same level of ESA certification and that they are produced in the system they claim to be e.g. cage, barn or free range. The business should also possess information about the poultry diseases monitored at the original site of production e.g. *Salmonella*, *Campylobacter*.

**Level 3, Element 3** – Requires that the **Approved Supplier procedure** includes what to do in the case where you must use unapproved suppliers in the case of an emergency. If you do need to use an unapproved supplier, you must keep a **record** of this incident.

**Level 3, Element 7** – Requires that the **Approved Supplier procedure** includes a review of the supplier’s performance. This means that each supplier needs to be **reviewed** based on its performance, at least annually – so KPIs relating to the supplier’s performance could be documented and relevant data collected throughout the year. This could be an activity included in the management review meeting.

## 1.10 Water

Any water used in shell egg processing must be **potable** (meeting the required government standard), and microbial **testing** of water is to be carried out at least **annually** (or as per legislative requirements, for example – NSW DPI requirements are that the water is tested every 6 months.) by a NATA accredited laboratory (i.e. certified to ISO 17025).

Any **failure in water quality** must be investigated and **immediate corrective action** be taken.

If water is treated (with chlorine or a similar decontamination chemical added) on site, then the **treatment process must be validated** as actually doing what it should be. This means that you need documented evidence that the chemical you are adding will ensure that the water, at the end of the process, is potable (if your customer sets more prescriptive requirements for the quality of water used, these must be met). **Validation will have to be undertaken** if you **change** chemicals or move to a different type of treatment, e.g. reverse osmosis instead of chlorine.

Chlorination of water on site must be tested daily.

**Section 8** – All water systems (holding tanks, treatments, recycling and sampling points) are to be documented in a **water distribution map** for both Levels 2 and 3.

### 1.11 Product and Packaging Traceability and Identification

An identification and traceability **procedure must be documented** to trace all eggs and egg pulp to its original location – a code unique to the processing site should be placed on the shell egg, compliant with state/territory legislation (example – PGD24/8).

**The Best Before Date** shall not be longer than **42 days from the date of packing**, and packing eggs within 96 hours of lay is the target time – a CAR can be issued if it is noted that eggs are packed over 144 hrs (6 days) from lay.

All **Australian Egg Labelling** guidelines must be adhered to, and must be available on site.

**Records** must be kept proving traceability of all products. It is a legal requirement for egg stamping in all states and territories in Australia, and it is expected that the Grading Floors will have a **record of codes** that have been used daily and **records** of the checks of those codes.

**Element 7 & 8 – Records** must be kept of an (at least) **annual** forward and backward trace that also includes a mass balance. This is when you count the eggs into the Grading Floor, and you can account for all eggs packed, egg products despatched and waste, and this adds up to match the number of eggs coming into the Grading Floor. This exercise should cover at **least three consecutive days of production** to ensure your procedures are effective. If the Grading Floor is on the same site as the farm, one trace check can be carried out covering both parts of the business.

### 1.12 Management of Product Recall and Withdrawal

Product recall, withdrawal and mock recall **procedures** must be documented.

FSANZ and relevant customers are to be notified within 48 hours if the recall procedure is enacted.

**Mock recall** is carried out annually by suitably **trained staff**. This could include the trace check and mass balance required for **Sections 7 and 8 in 1.11**. A mock recall should demonstrate full traceability, with the procedure taking no more than 4 hours (an ideal procedure should take 2 hours, as per key customer and retailer requirements).

**Level 3, Element 5 – The root cause** of any actual recall or withdrawal must be determined and fully documented – auditors are to make sure that **trained staff** and a deputy are available during business hours to co-ordinate the procedures of a recall or withdrawal.

### 1.13 Saleable Shell Egg Production – Levels 2 & 3

Eggs for sale must be **crack free** and have **no visible contamination** on them. As per **Section 5 of 1.9**, the business shall not knowingly purchase or use any eggs that are not suitable for human consumption. Discarded dirty eggs should be disposed of hygienically, and away from clean, intact eggs.

Eggs can be cleaned by using a dry disposable cloth and only potable water can be used in this process. This meets the requirements of **Section 1.10**.

A slightly dirty egg can be brushed with an egg brush or rubbed with a sanding sponge, loofa, paper towel or plastic scourer (if stained), with a gentle rubbing motion. Eggs with visible faeces,

soil or other matter that **cannot be removed** by dry cleaning should be segregated and wet washed.

Egg graders should use material that is dry, clean and not reused for cleaning eggs. For this reason disposable paper towels are recommended. If a dry cloth is used, an adequate supply should be available so that only a clean cloth is passed over the egg each time. Dirty cloths should be cleaned and sanitised after each use. If an alternative material is used for this process, it should be suitable for contact with food.

An example of an egg cleaning procedure can be found by searching “Egg Cleaning” here: <http://www.foodauthority.nsw.gov.au/search/resources-alpha>

Suitable detergents and sanitisers can only be used in accordance with the manufacturer’s instructions.

Equipment is to be cleaned and sanitised daily after use.

### 1.14 Inspection and In-process Testing of Shell Eggs and Egg Pulp – Levels 2 & 3

All incoming shell eggs and egg pulp products are **checked for cleanliness**, that they come from an **approved supplier**, and that they meet the required egg specification – eggs are checked for any cracks and/or defects, by egg candling or other means to highlight any defects within the egg.

Whichever method is used for egg washing, it will need to be validated annually to prove that the method is **effectively removing *Salmonella***.

Any oiling or ink placed on the outer shell of the egg should be of food grade.

The results of the **annual end of shelf life testing** that includes an assessment of the product weight, should be available for internal and external audits.

Documented **procedures** should be available for staff who carry out the above listed tasks.

Product testing is part of the verification process, checking that the process has been effective. Testing is not a preventive control measure. The ESA standard requires a number of different types of product tests:

- **Element 1.14.3 and 1.18.5** – Product assessment, which would usually be sensory, i.e. carried out on the actual product before the release of the packed product.
- **Element 1.14.7** – Shelf life assessment, which needs to demonstrate that the product meets specified quality and customer requirements at the end of the designated shelf life.
- **Element 1.14.8** – Annual testing of the edible portion of the egg for *Salmonella* to verify that the cleaning process is working effectively.

### 1.15 Packaging of Shell Eggs

All eggs that are packed should be free from any defects, **dry** and packed in **new clean egg cartons** or trays. As per **Element 5 of Section 1.9**, the business shall not knowingly purchase or use any eggs that are not suitable for human consumption.

All equipment used in the grading and packing of eggs shall be in a clean and hygienic condition.

The air temperature of the Grading Floor should **not cause any condensation** on the eggs that are being packed.

A documented **procedure** must be developed to explain the control measures in place, to stop the contamination or damage of the product. At **Level 3** (Element 3) this procedure must also include the controls against allergen cross-contamination. See also **Section 1.37** – Allergen Management.

A **documented register** listing all product specifications and labels is required (refer to **Section 1.8**).

### **Level 3 – Elements 9, 10 & 11**

Certificates of conformance for use, from suppliers, should be current. See also **Section 1.9** (Supplier Management).

**Obsolete packaging** should be removed from the Grading Floor and clearly marked not to be used, or disposed of appropriately and records sighted. Obsolete packaging is printed material that is no longer required, particularly where the printing includes **customer artwork** and/or product claims, e.g. organic. Examples of obsolete packaging may include discontinued products, or products with changed artwork and/or labelling. A **documented procedure** is required for the control and disposal of packaging owned/supplied by customers that you are packing for. See also Section 1.28 (Waste Management and Disposal).

## **1.16 Equipment Calibration**

There must be evidence that equipment has been calibrated at least **annually**, with **records** kept of the date, method and who carried out the calibration.

Any equipment that is found **to be out of calibration** should be removed from use, and any affected product must be treated as non-conforming product until proven otherwise (refer to **Section 1.17**). As soon as out of calibration equipment is identified you must, while keeping **records** of all activities undertaken:

- work out when it was **last confirmed** as calibrated
- work out **how much** (and what batches of, etc.) **product** has been 'used' on that equipment, e.g. scales/metal detector/pH meter
- find the **location of all of that product and place it on hold**, as per your procedure – see **Section 1.17** (Control of Non-conforming Product and Dropped Product)
- **reassess** all of the affected product (e.g. weighed/measured) with **appropriately calibrated** equipment.

**Level 3, Elements 5** – A **register of all equipment** in use should be sighted with detail that includes identification, location, accuracy, and calibration methods.

Operational checks including start-up checks will have to be **documented**.

## **1.17 Control of Non-conforming Product and Dropped Product – Levels 2 & 3**

**Procedures** shall be documented describing how non-conforming product is identified and reworked (for example, shell eggs can be reworked by washing or by pulping them).

Any potential food safety or quality hazards/incidents that have occurred will require documented evidence (**records**) that they have been **reported** to the proper authorities/customers/relevant

stakeholders, including ESA. If the potential hazard is an external risk, then notification is required. 'External' means that the affected product is no longer under the business's control.

Any **rejected eggs or egg pulp** are disposed of appropriately (refer to **Section 1.28**) and, if it is intended for use as animal food, it will have to be sent for further heat treatment to ensure that all pathogens are killed.

### 1.18 Final Inspection and Testing

A documented **procedure** is required to cover any testing/assessment that needs to be undertaken before the product is released to the customer for use, who has the responsibility to sign product out as 'released', and that all labs used for product testing are certified against NATA & ISO 17025.

#### Level 3 – Sections 5, 6 & 7

**Records** of the annual micro testing of shell egg products **will be held**. Additional testing may be undertaken as required by customers, e.g. pesticide residues, heavy metals, food additives, and chemical contaminants.

The product **assessments** are carried out during and at the end of the best before date period. A **record** will be held of product assessments. **Retained samples** will be kept as per customer requirements. Refer to Appendix 1 of the Grading and Packing Standard for egg specifications.

Product testing is part of the verification process, checking that the process has been effective. Testing is not a preventive control measure. The ESA standard requires a number of different types of product tests:

- **1.14.3 & 1.18.5** – Product assessment, which would usually be sensory, i.e. carried out on the actual product before the release of the packed product.
- **1.14.7** – Shelf life assessment, which needs to demonstrate that the product meets specified quality and customer requirements at the end of the designated shelf life.
- **1.14.8** – Annual testing of the edible portion of the egg for *Salmonella*, to verify that the cleaning process is working effectively.

Note: The Australian Department of Agriculture and Water Resources (DAWR) National Residue Survey does not include microbiological testing or additives.

### 1.19 Site Security

The buildings must be secure from unauthorised access, with **signs in place** stating the prevention of unauthorised access.

All staff, including casuals, need to be **trained** in site security requirements in their induction training. **Records** must be kept of the training and of the staff declaration (refer to Section 1.35).

A **record** (i.e. log book) of all visitors and contractors must be in place to record all relevant details – including recent overseas travel, any other Grading Floor visited, any illness in the last 48 hours, car registration number and loose items taken on to the floor (e.g. mobile phones).

All contractors and visitors must be in a clean and tidy state prior to entering the floor.

A **site map** is required, which documents where all staff facilities, gas, electricity points, drain flows, process flow, and emergency routes are located. This is a requirement of the major retailers.

The visitors and contractors log must also record loose items that are taken into production and storage areas by both visitors and contractors for Level 2 and 3.

### **Level 2 and 3 – Elements 9 & 10**

A re-entry **procedure** needs to be documented, e.g. for entry back on to the floor after an emergency evacuation such as a fire drill, etc.

The site security **controls are** reviewed and **tested annually**. This test process should be recorded.

## **1.20 Cleaning and Sanitation**

**Cleaning and sanitation schedules** must be documented – including the frequency and method of cleaning and who is responsible. Additional information must be documented relating to what has to be cleaned, chemicals and their concentrations to be used, and the documented work instructions on hand. Under **Level 3**, staff will have to have **training records** to demonstrate that they have been trained against these procedures and chemical handling practices (refer to **Sections 1.27 & 1.35**).

See **Section 1.26** (Interior Structure and Premises) for additional equipment cleaning requirements.

A **record** must be kept of the **pre-operational inspection** carried out and the effectiveness of the cleaning.

At **both Level 2 and 3**, additional information must be recorded, including what method of verification is carried on all equipment and surfaces. This **could** include ATP swabs or micro testing and who carried it out and signed off, as verified by senior staff. At Level 3, an additional inspection will have to be undertaken after **any maintenance has been carried out** on the Grading Floor equipment.

Any **contract cleaners** used will need to be 'approved' as per **Section 1.9**, and have **records** in place such as a service agreement or contract.

All hoses need to be stored off the floor, i.e. 'reeled'.

**Level 3, Section 7** – If pasteurisation of egg pulp takes place on site, **CIP (Cleaning In Place)** is normally carried out. Records will need to be kept, proving that CIP is working and does clean all of the equipment effectively. Verification **could** include testing for no chemical residue in the final rinse water, time and contact temperature and concentration of sanitiser use – pH of the final rinse water is another check that could be undertaken.

**Annual validation**, which usually involves testing the equipment to prove that the target hazard (e.g. *Salmonella* egg presence) has been removed, will have to **be recorded** as well.

Given that some disease-causing agents e.g. *Salmonella* can survive on plastic and cardboard; any cardboard or plastic egg filler or flat which comes from another egg farm needs to be decontaminated if it is being reused on your farm.



Decontamination of plastics can be approached in a two-step manner. The first is the removal of all visible organic matter and dirt (cleaning) and the second; sanitising. Sanitising can be done by:

- soaking items in very hot water: it is recommended that the items be immersed in water at a minimum temperature of 77°C for at least 30 seconds. The water temperature may need to be monitored with a thermometer to confirm it remains hot enough for the whole sanitation period.
- soaking items in diluted bleach
- saturating items with 70% alcohol
- applying a commercial food-grade sanitiser according to the manufacturer's instructions, with particular attention to the required concentration and contact time

Appropriate chemical sanitisers include chlorine-based compounds (e.g. hypochlorite or bleach), quaternary ammonium compounds, alcohol, iodophors (iodine), organic acids (e.g. peracetic acid) and hydrogen peroxide and should always be used as per manufacturers instructions.

Plastics need to be dried completely after sanitising before being reused.

Given the difficulty in effectively decontaminating cardboard it is advisable not to reuse cardboard egg flats/ fillers. If choosing to reuse cardboard, decontaminate by first removing all visible organic matter and dirt then heat treating. Heat treat cardboard by baking at 75°C for 20 minutes.

Effective sanitisation of wooden pallets is very difficult to achieve with either chemical or heat treatment methods. Wooden pallets should be kept free of all visible organic matter and dirt.

See the following page for more information, including the particulars of bleach sanitisation:

<https://www.foodstandards.gov.au/publications/Documents/Safe%20Food%20Australia/Appendix%206%20-%20Cleaning%20and%20sanitising%20surfaces%20and%20utensils.pdf>

## 1.21 Pest Management

A fully documented pest control **procedure** must be on site, and cover the following:

- who has what responsibilities including those carried out by external Pest Control Professional
- full details of their state licence or relevant chemical handling training
- the chemical that is used on site
- and when/frequency of activities to be carried out

**SDS** must be held on site for all chemicals used for pest control. Pest control chemicals on site must be secured and locked away when not in use, to prevent unauthorised access.

A **documented site map** must be held of all bait station locations (including temporary), traps and UV light attractants used on site, internally and externally.

Results of all inspections must be kept – either on paper or electronically, e.g. Pestnet system or service reports. Service reports will need to include any **temporary bait stations** being used, including start and removal dates.

All **bait stations** and **insect UV light units** must be clearly identified, tamperproof and secure in each location, and located to meet all stated controls so that there is no risk of contamination. All equipment (UV light, insecticides, etc.) should be in working order.

Regular inspection of bait stations should be conducted to ensure that rodent numbers are being monitored and that baits are maintained in working order. The site needs to demonstrate that the inspection regime is risk-based and takes into account factors like seasonable variation in rodent numbers and bait station type and condition.

A **pest sighting log** is a tool used by staff to record any sightings during routine staff inspections, so that they can be used by the Pest Control Professional at their next visit.

**Level 3, Section 13 – Trend analysis** needs to be undertaken on all species of pests sighted/trapped/found during pest control inspections **annually** or in the time of any infestations on site.

Dead or trapped rodents must be disposed of on that day of discovery.

## 1.22 Maintenance

To minimise the risk of cross-contamination of the shell eggs being graded and packed, there must be a documented **preventive maintenance program** for facilities and equipment on this site. The procedure would include all details of all equipment to be maintained, the frequency of maintenance, who is responsible, the process of accounting for any tools/parts used, and the methods used to ensure that there is no contamination of product.

All external or internal maintenance staff **must comply** with all **site hygiene** and food safety procedures as per **Sections 1.25, 1.30 and 1.32**. **Records** must be kept of this compliance.

Any material (e.g. lubricating oil) that comes in contact with product must not cause contamination, and must be **approved** for use in the food industry. **SDS** must be held for all chemicals used on site.

For **Level 3** – As stated in **Section 1.20**, after any maintenance activity has been carried out on equipment, an **inspection must be undertaken** to verify that the equipment is now ready for use on the Grading Floor, before re-starting any processing.

## 1.23 Foreign Object Control

Brittle objects including glass, some plastic or ceramics **should not be on the Grading Floor**. If this is unavoidable, documented precautions must be in place to prevent any contamination of product.

Any **wooden pallets used in the processing area shall be controlled**, and pallet debris is to be removed to prevent cross contamination.

**Level 3, Elements 3, 4 & 5** – A complete **register** of all brittle objects, including glass, needs to be maintained, along with documented **procedures** incorporating breakage and foreign object controls.

Staff need to be aware so that they can **identify any foreign objects** on the Grading Floor. One way to ensure that this happens is to undertake a bag or bucket audit on a regular basis to check on the presence of any foreign objects in processing areas.

## 1.24 Exterior Structure and Grounds

All **buildings and exteriors** should be of a good standard and be suitable for receiving eggs for processing. All external areas should be free from any insect and vermin breeding sites and in a **clean and tidy condition**.

All structures should be constructed so as to **prevent any rain entering** the building and so that the drainage system is in place and works effectively. This can be assessed during any washing process where water flows across the floor. All drain vents need to be external to the actual Grading Floor.

Ventilation should be of a sufficient standard to prevent any condensation and to allow the flow of clean air through the site.

For **Level 3** facilities, the construction of the building must also prevent factors affecting the quality of the egg.

## 1.25 Entry to Egg Grading Area

The procedure for entry to and exit from the facility buildings must be documented (see also **Section 1.30, 1.32** and **1.33** for guidance on what the procedure needs to include).

All entries to and exits from the Grading and Packing Floors shall include taps, soap and disposable paper towels, with a waste bins adjacent, and **signage** to show how to carry out hand washing correctly. These are all requirements of the major Australian retailers.

For **Level 3** – taps at the entry and exit must be hands free. ‘Hands free’ does not necessarily mean operated by sensor, but can be operated by elbows or legs.

## 1.26 Interior Structure and Premises

The Grading Floor is to be of an **adequate size** to carry out all grading and packing tasks, and would include areas for staff facilities, storage, refrigeration, receipt and dispatch.

All **doors** to the outside should be closed when not in direct use to prevent the entrance of pests, and be constructed of approved materials.

All piping and electrical cables are to be placed so as to allow easy cleaning of walls and floors.

All **floors** should be smooth, coved at floor to wall junctions, and all floors should be resistant to water pooling, i.e. so as to ensure that the drainage system flows in the correct direction (refer to **Section 1.24**). Structures need to meet the relevant legislative requirements, i.e. at the local and state/territory government levels.

All floors, **drain channels** and all wall surfaces need to be constructed so that they do not cause any contamination and are easily cleaned.

All equipment, pallets and all material need to be **stored** in such away so as not to cause any cross-contamination.

Pallets racks in place to be designed so as not to harbour any pests, and be able to be cleaned, e.g. so that birds and rats don't nest in them.

If **glass or hard plastic panels** are present they should be protected, i.e. be laminated, have wire mesh screens or monitoring in place, to minimise risk of contaminating shell eggs, egg pulp or egg products. For **Level 3** – Lamination of hard plastics is a mandatory requirement for the **Coles Food Manufacturing Supplier Requirements (CFMSR)** standard.

All **lighting** needs to be adequate and should not distort egg colour.

**Level 3, Elements 14 & 15** – The drainage systems from **any on site laboratories** must drain to the outside of the building before joining other waste system.

### 1.27 Chemicals and Cleaning Materials – Levels 2 & 3

All chemicals are to be purchased through an **approved supplier** that meets all of the requirements listed in Section 1.9.

All chemicals are **stored** in areas that are away from any processing in a secured and lockable location, with separated locations for any waste chemicals awaiting disposal and those chemicals that may react with each other, e.g. alkali and acid. A **spill kit** must be in place.

All chemicals must be clearly labelled, with a **record** of all chemical purchases kept.

**SDS** must be on hand for all chemicals held on site, including pest control chemicals, cleaning chemicals, water treatment and maintenance chemicals (refer to **Sections 1.10, 1.20, 1.21 & 1.22**).

All staff who have to handle chemicals are required to have been trained in chemical handling. **Records** of this training will need to be kept (refer to **Sections 1.20 & 1.35**).

Any chemicals (such as cleaning chemicals) that have been diluted on site by staff, will be labelled with the correct chemical name and the relevant dilution rate, e.g. 10% sodium hydroxide.

### 1.28 Waste Management and Disposal – Levels 2 & 3

A documented waste management **procedure** must cover all requirements for removal of waste, construction of waste containers, waste storage and the removal of liquid waste from the Grading Floor.

As stated in **Section 1.15**, any customer owned/supplied packaging that is no longer required, will need documented disposal methods.

### 1.29 Storage and Transport of Eggs and Egg Pulp

The rotation of stock needs to be managed and controlled.

The temperature for the storage and transport of **shell eggs** should be between 4°C and 18°C, for **liquid egg less than 5°C**, and for **frozen egg pulp** storage and transport should be at -18°C or below.

**Dried egg** products can be stored in ambient conditions.

Once shell eggs have been stored in a refrigerated environment they must not be stored in ambient conditions, **so that condensation does not occur**.

**Records** need to be kept of the minimum and maximum temperature at which the egg products have been stored.

**Level 3, Elements 1, 2 & 9** – A documented **procedure** is required to cover the following areas: stock rotation; loading and transport of eggs and egg products; and actions to be taken when there is a transport vehicle accident/incident.

**Records** are required to be held for stock movement and transport vehicle inspections. Any refrigeration breakdowns are to be fully recorded, including action that is taken to correct the problem.

All transportation contractors need to be documented as fully **approved suppliers** (refer to **Section 1.9**).

### 1.30 Personnel Health and Hygiene

A **personnel health and hygiene procedure** must be fully documented covering all staff, contractors and visitors who come on to the site. This includes the requirement to report to management by any person on site who has any illness or symptoms that could pose a possible risk to the food safety of the product.

If someone has been **sick with an illness** that could contaminate the food (refer to the list of Notifiable Diseases at <http://www.health.gov.au/internet/main/publishing.nsf/content/cda-pubs-cdi-2000-cdi2408-cdi2408g.htm>) then evidence of medical clearance should be sighted to confirm the person's suitability to return to work.

**Level 3, Section 5** – All compliance with the personnel health and hygiene procedure must be **monitored** and **records** kept. This means that someone has to make visual contact with people (staff, contractors, and visitors) to make sure that they are following this procedure, and keep records.

### 1.31 First Aid

There must be a **trained first aid person** on site, and a fully stocked **first aid kit** must be available. All cuts or sores must be covered.

**Level 3, Section 2** – Cuts or sores must be covered by a blue coloured dressing, and waterproof finger stalls or waterproof gloves must be worn.

### 1.32 Personal Hygiene

A fully documented personal hygiene **procedure** must be in place covering: items that are **not to be worn** (perfume or aftershave, jewellery except for plain wedding band, false fingernails, false eyelashes or nail polish, rings or studs on exposed parts of the body); as well as the requirement that food shall not be stored or consumed in any egg storage or handling areas of the site (refer to **Sections 1.30** and **1.33**). These are all requirements of all GFSI and retailer standards.

**Non-phenolic and non-perfumed** cleansers and sanitisers should be made available to all persons who work at the site.

**Level 3, Section 1** – Any other customer requirements must be adhered to and documented within the procedure.

### 1.33 Clothing and Locker Rooms

The documented **personal hygiene procedure** must be adhered to by all personnel on site, i.e. staff, contractors and visitors (refer to **Sections 1.30** and **1.32**).

Clean laundered uniforms are acceptable protective clothing in a shell egg Grading Floor. Pulp egg processing staff need to have designated protective clothing, as required by retail customers (**CFMSR** medium level requirement).

Where **protective clothing** is issued and then gets contaminated, it will be replaced and separated from clean clothing in storage.

Protective clothing must **not be worn** when going to the toilet or outside the premises.

**Level 3, Element 3** – Where an **external laundry** is used to wash uniforms, it must be a fully documented approved supplier and be monitored on its performance (refer to Section 1.9).

### 1.34 Staff Facilities

Make sure that **toilets** meet the following requirements:

- not to be located opening directly on to processing areas
- kept clean and not pose a risk of contaminating shell eggs or egg products
- have warm running water with liquid soap and sanitiser provided
- paper towels in place for hand drying ;and;
- have signage to show how to carry out hand washing correctly

These are all requirements of the major Australian retailers.

All personnel can only eat, drink and smoke in designated locations.

**Level 3, Element 1** – Hands free operating taps are required. This is a requirement of the major Australian retailers. Hands free does not necessarily mean be sensor operated taps, hands free means that the taps can be turned off and on with elbows or feet.

### 1.35 Training/Skills and Knowledge

The site **must designate a specific person** who is responsible for staff training.

All staff on site (full-time, part-time and casual) who have any contact with eggs and egg products, **must receive training** on the requirements for the grading and packing of shell eggs, and basic food safety training that includes all GMP/GHP procedures (refer to **Sections 1.21, 1.30, 1.32** and **1.33**), Food regulation requirements and the requirements of the Food Safety Program on site.

**Job specific training** is required for those staff who have the following responsibilities: HACCP team; candling techniques; chemical handling; cleaning; CCP monitoring; recall procedures;

product assessment; and customer requirements (refer to **Sections 1.2, 1.6, 1.7, 1.12, 1.19, 1.20, 1.21, 1.22, 1.27** and **1.31**).

All training is to be carried out in a **language understood** by the staff. **Refresher training** can be any type of training that is carried out more than once with staff, i.e. at induction and annually afterwards; it could be site security, allergen awareness or chemical handling.

**Records** must be kept for all training undertaken, including whether competency in the task has been reached.

A **training matrix** is required to be documented, covering the skills that the staff have, and is to be **reviewed annually** to identify additional training that staff may require.

**Level 3, Elements 4 & 6** – Allergen management and HACCP requirements training is required.

### 1.36 Crisis/Business Continuity Plan – Level 3 ONLY

A fully **documented business continuity plan (BCP)** is in place to cover every eventuality of crises to the business that could occur.

**Records** must be in place demonstrating that the plan has been tested **at least annually**, with a post-incident briefing taking place and results.

A BCP test is like a mock recall but needs to include a far wider situation – involving anything that could be a crisis to your business, e.g. flood, fire, bird flu epidemic, or animal liberation attack. This test will have to be **recorded** and the topic of the crisis changed yearly.

### 1.37 Allergen Management – Level 3 ONLY

Eggs are an allergen, but all materials known to be an allergen are to be **listed**. All relevant control measures to ensure that there is no allergenic cross-contamination are to be **documented**, i.e. an allergen control procedure needs to be documented – potential control measures; how are allergenic products used/stored and controlled to prevent cross contamination, e.g. by the cleaning program and staff training.

If you do **identify any allergens** on site (e.g. in staff lunches, vending machines), the cleaning procedures **must be** designed to effectively reduce/remove any allergenic cross-contamination. In this case these specific cleaning procedures will need to be **validated annually** for effectiveness (refer to **Section 1.20**).

### 1.38 Processing Egg Products (if applicable)

**Procedures** must be fully documented for all aspects of egg grading, packing, and any pasteurisation processes, and relevant **records** maintained. If an equivalent process is used **instead of pasteurisation**, then a **documented risk assessment** is undertaken (refer to Appendix 3 of the Grading and Packing for guidelines).

Eggs undergoing **any centrifuge processes** must only be clean shell eggs.

Any eggs that are **cracked but not leaking** (i.e. the membrane is not ruptured) can be used but **must be pasteurised first**.

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Any **physical contamination shall be removed** by a filter/sieve for finished products.

**All dried products** must be pasteurised (or undergo an equivalent process – refer to Appendix 3 of the Grading and Packing Standard for guidance) before being dried.

Finished egg products – pasteurised and dried egg powder – must be **stored separately** to raw product.

Eggs products are to be **chilled to <5°C or frozen to -18°C**.

The finished product **shelf life** requirement must not exceed the raw material shelf life unless **validated** to prove that quality and food safety aspects are not compromised.

**Records** of egg testing should show that *Salmonella* is **not detected in 25g** of product, and that these lab tests should occur at least **annually**.

All personnel **entering the Grading Floor** (staff, contractors and visitors) must wear head covering/hair net and a snood/beard net for facial hair, to prevent any contamination of egg products (refer to **Sections 1.30, 1.32 and 1.33**).

**Level 3, Element 11** – If protective clothing is laundered on site, the process must be validated. The ideal standard to measure the process against is the Australian Standard of laundered garments using TPC swabbing of laundered garments, ensuring that the results are documented and available for auditing purposes (refer to **Section 1.33**).

### 1.39 Packaging of Egg Products – Levels 2 & 3

All packaging material must be clean or new. **All containers** will need to be **inspected** visually before filling.

Product that comes from large vats prior to filling in the **closed line system**, must be inserted through the lid.

Strict controls must be in place to make sure that staff **do not contaminate** the product during the filling process. All bags must be **sealed immediately** and stored chilled at <5°C or frozen at -18°C.

**Records** of all egg product packaging and filling must be documented and made available for auditing.

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